



239 653307  
Sup. Ct.

**Vol. VII**  
**TRANSCRIPT OF RECORD**

(Pages 3199 to 3309)

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**Supreme Court of the United States**

**OCTOBER TERM, 1944**

**No. 56**

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**SOUTHERN PACIFIC COMPANY, APPELLANT,**

*vs.*

**STATE OF ARIZONA, EX REL. JOE CONWAY,  
ATTORNEY GENERAL OF THE STATE OF  
ARIZONA**

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**APPEAL FROM THE SUPERIOR COURT OF THE STATE OF ARIZONA,  
COUNTY OF PIMA**

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**FILED APRIL 12, 1944.**





# SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1944

No. 56

SOUTHERN PACIFIC COMPANY, APPELLANT,

vs.

STATE OF ARIZONA, EX REL. JOE CONWAY,  
ATTORNEY GENERAL OF THE STATE OF  
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APPEAL FROM THE SUPERIOR COURT OF THE STATE OF ARIZONA,  
COUNTY OF PIMA

VOL. VII

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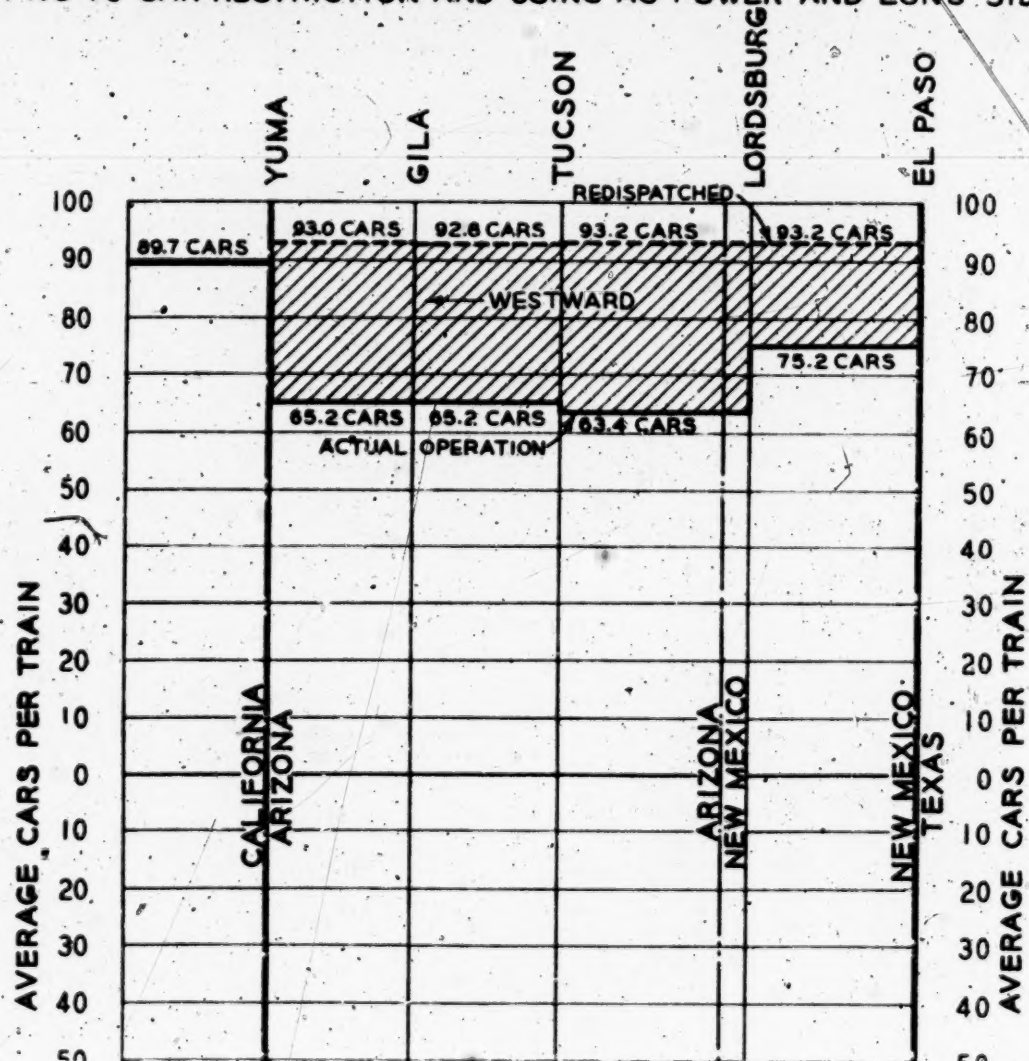
Defendant's Exhibit No. 215 (Witness Sines)  
Jan. 28, 1941

DEFTS. EX. NO

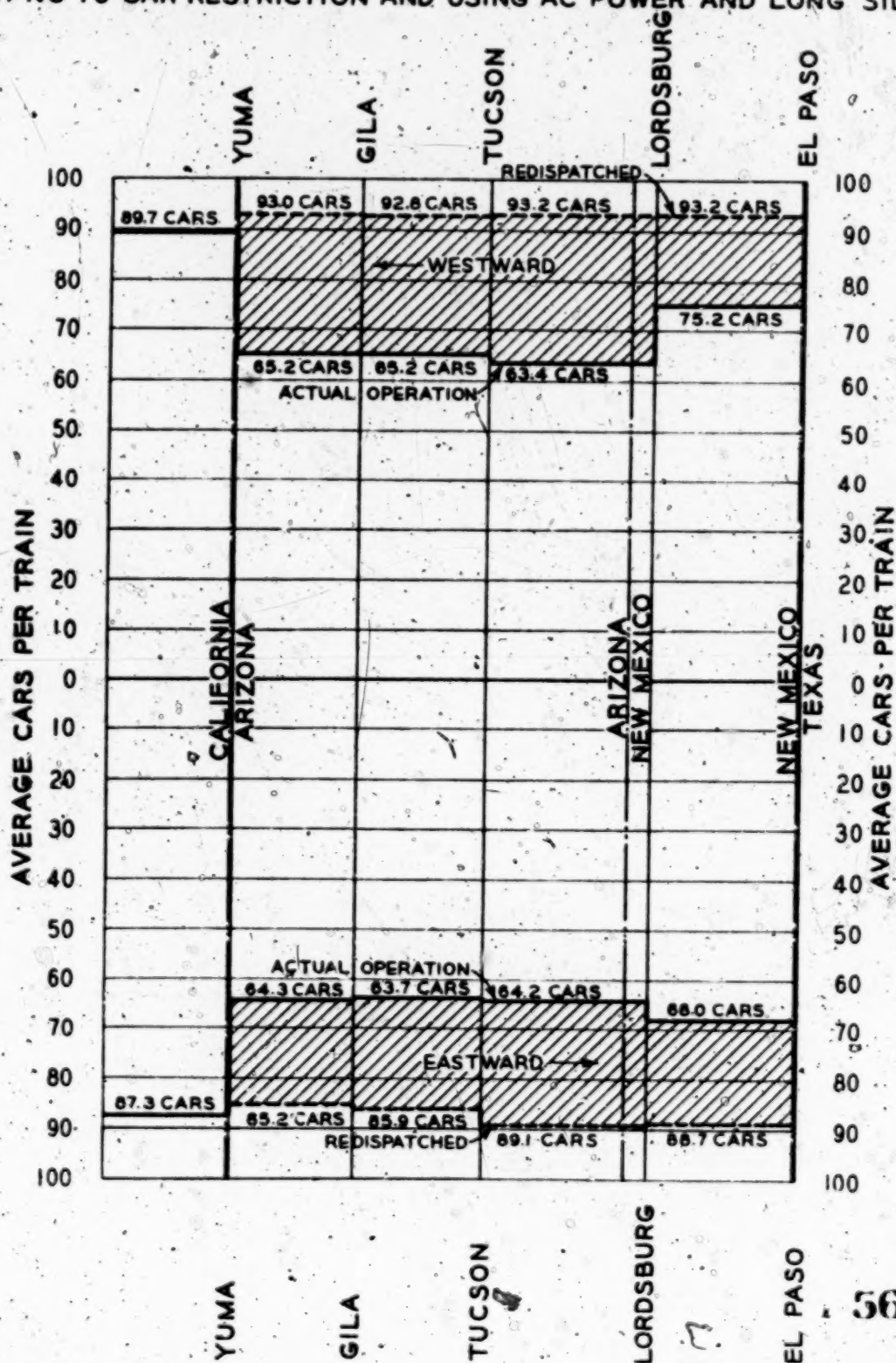
SOUTHERN PACIFIC COMPANY

RELATIVE TRAIN LENGTHS

CALIFORNIA - ARIZONA - NEW MEXICO - TEXAS.  
THROUGH AND LOCAL FREIGHT TRAINS JAN 28 1941  
OPERATING VIA YUMA, GILA, TUCSON, LORDSBURG AND EL PASO  
EXCLUDING STRAUSS TURNAROUND TRAINS  
BASED ON REDISPATCHING STUDY OF JUNE AND AUGUST 1938  
WITH NO 70 CAR RESTRICTION AND USING AC POWER AND LONG SIDINGS



EXCLUDING STRAUSS TURNAROUND TRAINS  
 BASED ON REDISPATCHING STUDY OF JUNE AND AUGUST 1938  
 WITH NO 70 CAR RESTRICTION AND USING AC POWER AND LONG SIDINGS



5676



Jan. 29, 1941

SOUTHERN PACIFIC COMPANY - Pacific Lines

Annual Report to the Interstate Commerce Commission

Report for the Year ended December 31, 1939

541. REVENUE FREIGHT CARRIED DURING THE YEAR

Give the particulars of the revenue from the commodities carried on the respondent's lines during the year, the revenue from which is includible in account No. 701, "Freight", classifying them in accordance with the Interstate Commerce Commission's Order of November 22, 1927, in the Matter of Freight Classification, effective on January 1, 1928, as amended by its Order of December 14, 1938.

Class 701-A includes revenue from forwarder traffic only, all L. C. L. traffic being included in Class 701-B. Revenue of forwarder traffic should be reported against commodity class designations under civil labor, class 701-A may be reported against forwarding companies or their subsidiaries, but not less than approximately 80 percent of the respondent's line. The term "Forwarder traffic" is defined as traffic consigned by or to a forwarder, i. e., a company,

firm, or individual recognized as engaged in the business of collecting and accumulating less-than-carload shipments in a consolidated carload without an ownership interest in the property so handled.

A "carload" for the purpose of this report should consist of a shipment of not less than 10,000 pounds of one commodity, from one consignor to one consignee. Where mixed carload ratings are provided in classifications or tariffs, a mixed carload should be treated as a carload within the meaning of this paragraph, provided such shipment is from one consignor to one consignee at one destination, or in the case of shipments upon which stop-overs are permitted, from one consignor to two or more consignees, each at a different destination; and provided the shipment is waybilled as such, and the charges are collected upon the basis of the carload rate applicable. In such cases the shipment should be treated as a carload of that commodity which forms the major portion of the shipment in freight.

Commodity group & class	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S LINES			
	TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS	
	Number of carloads (a)	Number of tons (1,000 lb.) (b)	Number of carloads (c)	Number of tons (1,000 lb.) (d)
GROUP 1. PRODUCTS OF AGRICULTURE (C. L.)				
Barley and rye	2,786	108,379	295	11,689
Rice	545	19,194	116	4,013
Grain, n. o. s.	680	21,242	82	1,680
Flour	5,835	184,150	684	26,650
Meal, corn	1,324	46,669	320	11,967
Flour and meal, edible, n. o. s.	2	818	4	197
Cereal food preparations, edible, n. o. s.	3,113	81,197	459	12,804
Mill products, n. o. s.	27	2,564	44	1,284
Hay and alfalfa	80	2,028	9	148
Straw	284	3,929	155	2,838
Tobacco, leaf	4,295	113,235	2,133	62,477
Cotton in bales	2,203	31,211	275	3,484
Cotton linters, notes, and regins	41	500	19	503
Cottonseed	22	289	-	-
Cottonseed meal and cake	12,800	158,771	741	18,538
Oranges and grapefruit	260	4,777	144	3,254
Lemons, limes, and citrus fruits, n. o. s.	1,414	47,600	72	1,924
Apples, fresh	840	27,234	333	8,332
Bananas	2,365	41,641	20,725	372,242
Berries, fresh	598	10,342	7,657	134,186
Cantaloupes and melons, n. o. s.	1,391	21,466	38	696
Grapes, fresh	1,751	18,452	543	5,751
Peaches, fresh	21	212	62	626
Watermelons	324	3,626	12,811	143,664
Fruits, fresh, domestic, n. o. s.	1,074	21,602	14,487	243,899
Fruits, fresh, tropical, n. o. s.	2,793	46,464	1,811	27,192
Potatoes, other than sweet	1,339	16,612	1,876	15,938
Cabbages	3,344	63,032	8,295	137,604
Onions	3	36	155	2,464
	5,172	87,315	3,990	63,707
	62	828	825	11,805
	1,097	16,945	761	11,885
	1,000	1,000	1,000	1,000

541. REVENUE FREIGHT CARRIED DURING THE YEAR—Continued

In stating the number of tons received from connecting carriers, all shipments should be included that, so far as apparent from the information on the waybills or abstracts of waybills, have been received from connecting rail carriers either directly or indirectly. Shipments from boat lines should also be included when identified as having had previous rail transportation by United States rail carriers or as moving on joint through bills of lading by coastwise water carriers and railways.

Tonnage originating on switching roads connecting directly or indirectly with respondent's line should be regarded as tonnage originated by respondent.

Import traffic and traffic from outlying possessions of the United States received from water carriers should be regarded as originating at the port of entry.

All other tonnage should be treated as originating on line, including finished products from transit points.

The terms "delivered to connecting carrier line" should be understood in a manner consistent with the terms of "received from connecting carriers" as used in the preceding paragraph.

"Freight revenue" means reporting carrier without adjustment for absorptions or corrections. In the note on page 518 show the aggregate protective services to perishable freight (without portion thereof credited to account No. 101, on whose rails protective service to perishable which the charges are credited, will report the such services. Tariff charges for specific service in transit, or at destination, which are not in (standard) charges from the point at which the first applicable, and which are collected from should be reported by the carrier to which such

REVENUE FREIGHT RECEIVED FROM CONNECTING CARRIERS				TOTAL REVENUE FREIGHT CARRIED	
TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS		Number of carloads (f)	Number of tons (1,000 lb.) (g)
Number of carloads (e)	Number of tons (1,000 lb.) (d)	Number of carloads (h)	Number of tons (1,000 lb.) (i)		
1,824	82,509	513	26,104	5,358	228,621
3,555	149,319	691	28,929	4,907	201,455
201	6,566	10	288	883	29,776
153	5,434	128	5,735	6,200	221,969
500	15,719	66	2,515	2,210	76,870
24	743	2	65	80	1,823
4,528	119,735	575	18,673	8,705	231,971
52	1,539	4	120	197	5,407
158	4,483	1	25	248	6,674
377	17,821	60	1,097	1,476	25,685
3,674	98,492	485	13,313	10,587	287,517
252	4,133	38	609	2,768	39,437
8	110	7	88	75	1,201
92	1,902	-	-	114	2,191
203	4,453	271	7,334	14,015	189,096
9	163	13	275	426	8,469
42	1,212	2	46	1,530	50,782
333	9,008	4	147	1,510	44,721
655	11,888	7,253	130,134	30,998	555,305
188	2,831	4,579	79,110	13,016	226,468
1,220	21,531	716	13,344	3,365	57,037
976	10,786	620	6,832	3,890	41,821
3	29	10	160	96	1,027
28	320	1,069	12,052	14,232	159,662
161	2,574	1,621	27,265	17,343	225,340
614	10,412	53	750	5,271	84,818
140	1,737	14	183	2,769	34,470
1,074	21,538	959	16,098	13,672	238,272
5	70	69	934	232	3,504
1,398	24,062	1,123	17,644	11,683	192,728
23	312	127	1,735	1,037	14,380
67	1,009	141	2,140	2,068	31,979
357	4,157	1,280	15,005	4,171	46,741
1,000	1,000	1,000	1,000	85,593	1,023,861

for the Year ended December 31, 1939

**WIGHT CARRIED DURING THE YEAR**—Continued

ing carriers, all  
in the informa-  
received from  
shipments from  
g had previous  
oving on joint  
lways.  
rectly or indi-  
originated by

United States  
ing at the port  
line, including

The terms "delivered to connecting carriers" and "terminating on line" should be understood in a manner consistent with the above defini-  
tions of "received from connecting carriers" and "originating on line."  
"Freight revenue" means reporting carrier's gross freight revenue  
without adjustment for absorptions or corrections.

In the note on page 518 show the aggregate of the gross charges for  
protective services to perishable freight (without deduction for any pro-  
portion thereof credited to account No. 101, "Freight"). The carrier  
on whose rails protective service to perishable freight originates, or to  
which the charges are credited, will report the gross tariff charges for  
such services. Tariff charges for specific services performed at origin,  
in transit, or at destination, which are not included in the established  
(standard) charges from the point at which the protective service was  
first applicable, and which are collected from shippers or consignees,  
should be reported by the carrier to which such charges accrue.

CONNECTING CARRIERS		TOTAL REVENUE FREIGHT CARRIED		Freight revenue (dollars)		Class No.
Number of tons (2,000 lb.) (A)	Number of carloads (B)	Number of tons (2,000 lb.) (C)				
26 104	5,358	228 621		840 175		10
28 929	4,907	201 455		888 588		20
288 883		29 776		121 724		30
5 735	6,200	221 269		445 466		40
2 515	2,210	76 870		277 124		41
65 50		1 823		7 794		42
18 673	8,705	231 971		830 537		50
120 197		5 407		10 641		51
25 248		6 614		33 483		52
1 097	1,476	25 685		177 378		53
13 313	10,587	287 517		711 478		54
609 2,768		37 437		110 264		55
88 75		1 201		5 140		56
- 114		2 191		18 515		57
7 334	14,015	189 096		965 286		58
275 426		8 469		52 985		59
46 1,530		50 782		101 037		60
147 1,510		44 721		158 367		61
130 134	30,998	555 305	5	817 618		62
79 110	13,016	226 468	2	186 508		63
13 344	3,365	57 037		398 164		64
6 832	3,890	41 821		382 294		65
160 96		1 027		10 066		66
12 052	14 232	159 662	2	189 131		67
27 265	17,343	295 340	3	020 171		68
750 5,271		84 818		463 362		69
183 2,749		34 470		337 582		70
16 098	13,672	238 272	1	963 741		71
934 232		3 504		36 687		72
17 644	11,683	192 728	1	351 449		73
1 735	1,037	14 380		182 234		74
2 140	9 228	33 555				75



1927, in the Matter of Freight Commodity Statistics, effective on January 1, 1928, as amended by order of December 14, 1933.

Classes 10 to 701 should include carload traffic only, all L. C. L. traffic being included in class 710.

Information as to carloads, tons, and revenue of forwarder traffic included in class 701 should be reported against commodity class designated 701-A. To avoid undue clerical labor, class 701-A may be restricted to the principal forwarding companies or their subsidiaries originating in the aggregate not less than approximately 80 percent of such traffic handled on respondent's line. The term "Forwarder traffic" means freight traffic consigned by or to a forwarder, i. e., a company,

A "carload" for the purpose of this report should consist of a shipment of not less than 10,000 pounds of one commodity from one consignor to one consignee. Where mixed carload ratings are provided in classifications or tariffs, a mixed carload should be treated as a carload within the meaning of this paragraph, provided such shipment is from one consignor to one consignee at one destination, or in the case of shipments upon which stop-overs are permitted, from one consignor to two or more consignees, each at a different destination; and provided the shipment is waybilled at, and the charges are collected upon, the basis of the carload rate applicable. In such cases the shipment should be treated as a carload of that commodity which forms the major portion of the shipment in weight.

Class No.		Commodity group or class	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD					
			TERMINATING ON LINE			DELIVERED TO CONNECTING CARRIERS		
			Number of carloads (b)	Number of tons (1,000 lb.) (c)		Number of carloads (d)	Number of tons (1,000 lb.) (e)	
(a)								
GROUP I. PRODUCTS OF AGRICULTURE (C. L.)								
10	Wheat	2,786	108	379	295	11	629	
20	Corn	545	19	194	116	4	013	
30	Oats	620	21	242	52	1	680	
40	Barley and rye	5,235	184	150	684	26	650	
41	Rice	1,324	46	669	320	11	967	
42	Grain, n. o. s.	20		818	4		197	
50	Flour, wheat	3,113	81	359	459	12	204	
51	Meal, corn	97	2	564	44	1	184	
52	Flour and meal, edible, n. o. s.	80	2	018	9		148	
53	Cereal food preparations, edible, n. o. s.	284	3	929	155	2	836	
54	Mill products, n. o. s.	4,295	113	235	2,133	62	477	
70	Hay and alfalfa	2,203	31	211	275	3	484	
71	Straw	41		500	19		503	
80	Tobacco, leaf	22		289	-	-	-	
90	Cotton in bales	12,800	158	771	741	18	538	
91	Cotton linters, nolls, and regins	260	4	777	144	3	254	
92	Cottonseed	1,414	47	600	72	1	924	
93	Cottonseed meal and cake	840	27	234	333	8	332	
100	Oranges and grapefruit	2,365	41	641	20,725	372	242	
111	Lemons, limes, and citrus fruits, n. o. s.	598	10	341	7,651	134	186	
120	Apples, fresh	1,391	21	466	38		696	
121	Bananas	1,751	18	452	543	5	751	
122	Berries, fresh	21		212	62		626	
123	Cantaloupes and melons, n. o. s.	324	3	626	12,811	143	664	
124	Grapes, fresh	1,074	21	602	14,487	243	899	
125	Peaches, fresh	2,793	46	464	1,811	27	192	
126	Watermelons	1,339	16	612	1,276	15	938	
127	Fruits, fresh, domestic, n. o. s.	3,344	63	032	8,295	137	604	
128	Fruits, fresh, tropical, n. o. s.	3		36	155	2	464	
130	Potatoes, other than sweet	5,172	87	315	3,990	63	707	
140	Cabbage	62		828	825	11	595	
141	Onions	1,099	16	945	761	11	885	
142	Tomatoes	140	1	703	2,394	25	876	
143	Vegetables, fresh, n. o. s.	1,773	21	471	74,206	886	098	
144	Beans and peas, dried	686	17	756	1,941	59	660	
145	Fruits, dried or evaporated	5,149	125	863	2,895	94	632	
146	Vegetables, dry, n. o. s.	124	2	161	235	3	719	
147	Vegetable-oil cake and meal, except cottonseed	229	5	834	310	7	398	
148	Peanuts	21		357	2		60	
149	Flaxseed	634	20	028	4		118	
150	Sugar beets	22,379	879	810	2,959	119	012	
151	Products of agriculture, n. o. s.	5,049	117	116	4,093	104	544	
TOTAL PRODUCTS OF AGRICULTURE		93,439	2	394 610	168,324	2	643 498	

† Not required from switching and terminal companies.

STRAIL RAILWAY CORPORATION—OPERATING—A

boat lines should also be included when identified as having had previous rail transportation by United States rail carriers or as moving on joint through bills of lading by seaway water carriers and railways.

Tonnage originating on switching roads connecting directly or indirectly with respondent's line should be regarded as tonnage originated by respondent.

Import traffic and traffic from outlying possessions of the United States received from water carriers should be regarded as originating at the port of entry.

All other tonnage should be treated as originating on line, including finished products from transit points.

without adjustment for absorptions or correct.

In the note on page 518 show the aggregate protective services to perishable freight (with portion thereof credited to account No. 101, on whose rails protective service to perishable which the charges are credited, will report such services. Tariff charges for specific service in transit, or at destination, which are not in (standard) charges from the point at which first applicable, and which are collected from should be reported by the carrier to which such

Class No.	Commodity group or class	REVENUE FREIGHT RECEIVED FROM CONNECTING CARRIERS				TOTAL REVENUE FREIGHT CARRIED	
		TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS		Number of carloads (f)	Number of tons (1,000 lb.) (g)
		Number of carloads (f)	Number of tons (1,000 lb.) (g)	Number of carloads (h)	Number of tons (1,000 lb.) (i)	Number of carloads (j)	Number of tons (1,000 lb.) (k)
10	Wheat	1,824	82,509	513	26,104	5,358	228,621
20	Corn	3,555	149,319	691	28,929	4,907	201,455
30	Oats	201	6,566	10	288	883	29,776
40	Barley and rye	153	5,434	128	5,735	6,200	221,969
41	Rice	500	15,719	66	2,515	2,210	76,870
42	Grain, n. o. s.	24	743	2	65	50	1,823
50	Flour, wheat	4,598	119,735	575	18,673	8,705	231,971
51	Meal, corn	52	1,539	4	120	197	5,407
52	Flour and meal, edible, n. o. s.	158	4,483	1	25	248	6,674
53	Cereal food preparations, edible, n. o. s.	977	17,821	60	1,097	1,476	25,685
54	Mill products, n. o. s.	3,674	98,492	485	13,313	10,587	287,517
70	Hay and alfalfa	252	4,133	38	609	2,768	39,437
71	Straw	8	110	7	88	75	1,201
80	Tobacco, leaf	22	1,902	-	-	114	2,191
90	Cotton in bales	203	4,453	271	7,334	14,015	189,096
91	Cotton linters, nolls, and regins	9	163	13	275	426	8,469
92	Cottonseed	42	1,212	2	46	1,530	50,782
93	Cottonseed meal and cake	333	9,008	4	147	1,520	44,721
100	Oranges and grapefruit	655	11,288	7,253	130,134	30,998	555,305
111	Lemons, limes, and citrus fruits, n. o. s.	188	2,831	4,579	79,110	13,016	226,468
120	Apples, fresh	1,220	21,531	716	13,344	3,365	57,037
121	Bananas	976	10,786	620	6,832	3,890	41,821
122	Berries, fresh	3	29	10	160	96	1,027
123	Cantaloupes and melons, n. o. s.	28	320	1,069	12,052	14,232	159,662
124	Grapes, fresh	161	2,574	1,621	27,265	17,343	295,340
125	Peaches, fresh	614	10,412	53	750	5,271	84,818
126	Watermelons	240	1,737	14	183	2,769	34,470
127	Fruits, fresh, domestic, n. o. s.	1,074	21,538	959	16,098	13,672	238,272
128	Fruits, fresh, tropical, n. o. s.	5	70	69	934	232	3,504
130	Potatoes, other than sweet	1,398	24,062	1,123	17,644	11,683	192,728
140	Cabbage	23	312	127	1,735	1,037	14,380
141	Onions	67	1,009	141	2,140	2,068	31,979
142	Tomatoes	357	4,157	1,280	15,005	4,171	46,741
143	Vegetables, fresh, n. o. s.	543	6,525	9,071	109,767	85,593	1,023,861
144	Beans and peas, dried	138	3,535	451	14,044	3,216	94,995
145	Fruits, dried or evaporated	928	23,109	64	2,032	9,036	245,636
146	Vegetables, dry, n. o. s.	14	218	51	797	424	6,895
147	Vegetable-oil cake and meal, except cottonseed	46	1,805	9	374	594	15,411
148	Peanuts	222	4,187	19	351	264	4,911
149	Flaxseed	37	1,196	-	-	675	21,341
150	Sugar beets	894	33,631	-	-	26,232	1,032,411
151	Products of agriculture, n. o. s.	811	20,629	363	10,824	10,316	253,113
152	TOTAL PRODUCTS OF AGRICULTURE	27,157	730,832	32,532	566,938	321,452	6,335,878

STRAIL RAILWAY CORPORATION—OPERATING—A

† Not required from switching and terminal companies.

received from  
shipments from  
which had previous  
owing on joint  
ways.  
directly or indi-  
cated by

United States  
ing at the port  
line, including

tions of "received from connecting carriers" and "originating on line."  
"Freight revenue" means reporting carrier's gross freight revenue  
without adjustment for absorptions or corrections.  
In the note on page 518 show the aggregate of the gross charges for  
protective services to perishable freight (without deduction for any pro-  
portion thereof credited to account No. 101, "Freight"). The carrier  
on whose rails protective service to perishable freight originates, or to  
which the charges are credited, will report the gross total charges for  
such services. Tariff charges for specific services performed at origin,  
in transit, or at destination, which are not included in the established  
(standard) charges from the point at which the protective service was  
first applicable, and which are collected from shippers or consignees,  
should be reported by the carrier to which such charges accrue.

CONNECTING CARRIERS			TOTAL REVENUE FREIGHT CARRIED			Freight revenue (dollars)			Class No.	
Number of tons (Long T.) (C)			Number of carloads (C)	Number of tons (Long T.) (C)		D				
	26	104	5,358		228	621		840	175	10
	28	929	4,907		201	455		888	588	20
		288	883		29	776		121	724	30
	5	735	6,200		221	969		445	466	40
	2	515	2,210		76	870		277	124	41
		65	50		1	823		7	794	42
	18	673	8,705		231	971		830	537	43
		120	197		5	407		19	641	44
		25	248		6	674		33	483	45
	1	097	1,476		25	685		177	378	46
	13	313	10,587		287	517		711	478	47
		609	2,768		39	437		110	264	48
		88	75		1	201		5	140	49
	-		114		2	121		18	515	50
	7	334	14,015		189	096		965	286	51
		275	426		8	469		52	985	52
		46	1,530		50	782		101	037	53
		147	1,510		44	721		158	367	54
	130	134	30,998		535	305	5	817	618	55
	79	110	13,016		226	468	2	186	508	56
	13	344	3,365		57	037		398	164	57
	6	832	3,890		41	821		382	294	58
		160	96		1	027		10	066	59
	12	052	14 232		159	662	2	189	131	60
	27	265	17,343		295	340	3	020	171	61
		750	5,271		84	818		463	362	62
		183	2,769		34	470		337	582	63
	16	098	13,672		238	272	1	963	741	64
		934	232		3	504		36	687	65
	17	644	11,683		192	728	1	351	449	66
	1	735	1,037		14	380		182	234	67
	2	140	2,068		31	979		08	112	68
	15	005	4,171		46	741		17	071	69
	109	767	85,993	1	023	861	12	873	139	70
	14	044	3,216		94	995		699	070	71
	2	032	9,036		245	636	1	181	642	72
		797	424		6	895		59	321	73
		374	594		15	417		27	617	74
		351	264		4	957		35	071	75
			675		21	34		53	511	76
	-		26,232	1	032	45	4	073	495	77
	10	824	10,316		253	173	1	446	285	78
	566	938	321,452	6	335	878	42	319	343	79



## SOUTHERN PACIFIC COMPANY - Pacific Lines

Annual Report to the Interstate Commerce Commission

Report for the Year ended December 31, 1933

## 541. REVENUE FREIGHT CARRIED DURING THE YEAR - Continued

Class No.	Commodity group or class	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD			
		TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS	
		Number of carloads (b)	Number of tons (1,000 lb.) (c)	Number of carloads (d)	Number of tons (1,000 lb.) (e)
GROUP II. ANIMALS AND PRODUCTS (C. L.)					
170	Horses, mules, ponies, and asses	233	2 737	118	1 354
180	Cattle and calves, single-deck	10,993	128 646	5,091	53 745
191	Calves, double-deck	338	4 698	421	5 108
192	Sheep and goats, single-deck	156	1 199	55	392
193	Sheep and goats, double-deck	2,619	34 520	2,781	28 515
200	Hogs, single-deck	137	1 303	32	298
201	Hogs, double-deck	311	5 184	7	63
210	Fresh meats, n. o. s.	1,196	16 209	13	163
220	Meats, cured, dried, or smoked	117	2 051	9	160
231	Butterine and margarine	68	1 249	3	33
232	Packing-house products, edible, n. o. s., not including animal meats	442	6 467	24	394
240	Poultry, live	-	-	7	105
241	Poultry, dressed	123	1 784	362	5 842
250	Eggs	95	881	68	1 075
260	Butter	39	681	32	493
261	Cheese	265	4 883	22	499
270	Wool	336	3 751	275	4 449
271	Hides, green	115	3 062	194	6 735
281	Leather	2	10	56	786
290	Fish or sea-animal oil	745	27 302	1,334	40 188
301	Animals, live, n. o. s.	-	-	1	15
302	Animal products, n. o. s. (other than larders and larder materials)	1,658	43 800	1,943	53 175
310	TOTAL ANIMALS AND PRODUCTS	19,988	230 277	12,848	203 597
GROUP III. PRODUCTS OF MINES (C. L.)					
320	Anthracite coal	-	-	-	-
330	Bituminous coal	329	11 350	991	30 938
340	Coke	427	15 257	58	1 842
350	Iron ore	60	3 425	-	-
360	Copper ore and concentrates	12,214	1 017 835	94	5 525
371	Lead ore and concentrates	377	18 926	1	32
372	Zinc ore and concentrates	-	-	156	8 440
380	Ores and concentrates, n. o. s.	3,573	197 827	738	35 500
390	Gravel and sand (other than glass or molding)	37,117	2 102 778	967	52 094
401	Stone, broken, ground, or crushed	10,609	527 607	471	24 824
402	Stone, rough, n. o. s.	93	2 098	20	791
410	Stone, finished, n. o. s.	9	82	4	78
420	Petroleum, crude	1,178	54 098	32	1 515
430	Asphalt (natural, by-product, or petroleum)	6,592	219 198	1,959	68 648
440	Salt	6,784	260 212	489	14 238
450	Phosphate rock, crude (ground or not ground)	3	127	1	30
461	Sulphur (brimstone)	384	16 258	13	300
470	Products of mines, n. o. s.	12,315	637 655	1,839	88 278
480	TOTAL PRODUCTS OF MINES	97,964	5 084 893	7,833	333 113

## 541. REVENUE FREIGHT CARRIED DURING THE YEAR - Continued

Class No.	Commodity group or class	REVENUE FREIGHT RECEIVED FROM CONNECTING CARRIERS				TOTAL REVENUE FREIGHT CARRIED	
		TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS		Number of carloads (b)	Number of tons (1,000 lb.) (c)
		Number of carloads (d)	Number of tons (1,000 lb.) (e)	Number of carloads (f)	Number of tons (1,000 lb.) (g)		
170	Horses, mules, ponies, and asses	180	2 104	23	248	554	6 44
180	Cattle and calves, single-deck	6,633	78 820	1,292	13 612	24,009	274 82
190	Calves, double-deck	248	3 992	130	1 640	1,137	15 39
190	Sheep and goats, single-deck	64	432	15	121	290	2 14
190	Sheep and goats, double-deck	1,705	20 380	183	1 947	7,288	85 36
200	Hogs, single-deck	60	537	3	29	232	2 16
210	Hogs, double-deck	1,413	19 720	17	219	1,748	25 18
220	Fresh meats, n. o. s.	126	1 627	15	333	1,350	18 33
230	Meats, cured, dried, or smoked	1,315	24 278	7	199	1,448	26 68
240	Butterine and margarine	15	200	31	394	117	1 87
250	Packing-house products, edible, n. o. s., not including animal meats	247	3 786	11	208	724	10 85
260	Poultry, live	50	362	9	68	66	53
270	Poultry, dressed	90	1 269	21	323	596	9 21
280	Eggs	134	1 827	205	3 258	502	7 04
290	Butter	364	5 089	2	32	437	6 29
300	Cheese	137	2 001	18	282	442	7 66
310	Wool	8	107	11	135	630	8 44
320	Hides, green	14	369	7	259	330	10 42
330	Leather	3	40	-	-	61	80
340	Fish or sea-animal oil	65	1 999	35	1 088	2,179	70 47
350	Animals, live, n. o. s.	2	45	-	-	3	6
360	Animal products, n. o. s. (other than larders and larder materials)	497	11 302	118	3 048	4,216	111 32
370	<b>TOTAL ANIMALS AND PRODUCTS</b>	<b>13,370</b>	<b>180 285</b>	<b>2,153</b>	<b>27 443</b>	<b>48,359</b>	<b>701 56</b>
380	Anthracite coal	90	4 289	-	-	90	4 28
390	Bituminous coal	3,351	119 444	1,619	76 247	6,290	237 97
400	Coke	1,052	40 669	202	6 824	1,739	64 59
410	Iron ore	17	938	-	-	77	4 36
420	Copper ore and concentrates	24,541	2 630 493	16	605	42,865	2 654 42
430	Lead ore and concentrates	121	5 093	1	50	500	24 10
440	Zinc ore and concentrates	10	447	170	8 590	336	17 47
450	Ores and concentrates, n. o. s.	1,030	50 553	695	33 118	6,036	316 29
460	Gravel and sand (other than glass or molding)	2,872	164 172	22	1 113	40,977	2 320 15
470	Stone, broken, ground, or crushed	716	36 523	286	15 633	12,082	604 58
480	Stone, rough, n. o. s.	48	1 642	2	57	123	4 58
490	Stone, finished, n. o. s.	34	1 162	7	376	54	1 71
500	Petroleum, crude	-	-	30	1 115	1,240	56 76
510	Asphalt (natural, by-product, or petroleum)	762	21 696	395	14 839	9,708	330 54
520	Salt	249	7 132	7	331	7,469	281 90
530	Phosphate rock, crude (ground or not ground)	135	6 519	1	40	140	6 71
540	Sulphur (brimstone)	37	1 724	18	768	452	19 05
550	Products of mines, n. o. s.	6,285	328 401	1,777	82 433	22,216	1 136 76
560	<b>TOTAL PRODUCTS OF MINES</b>	<b>41,349</b>	<b>2 426 907</b>	<b>5,248</b>	<b>242 137</b>	<b>152,394</b>	<b>8 087 09</b>

for the Year ended December 31, 1933

515

WIGHT CARRIED DURING THE YEAR—Continue

CARRIERS		TOTAL REVENUE FREIGHT CARRIED		Freight revenue (dollars)	Class No.
CONNECTING CARRIERS		Number of carloads	Number of tons (1,000 lb.)		
Number of tons (1,000 lb.)	(a)	(b)	(c)	(d)	
	248	554	6 443	67 082	170
13 612	24,009	274 823	1 721 371		120
1 640	1,137	15 397	115 651		131
	121	290	14 701		132
1 947	7,268	85 362	549 804		181
	29	232	13 965		205
	219	1,748	203 341		211
	333	1,350	99 892		212
	199	1,448	142 357		220
	394	117	24 473		271
	208	724	87 531		272
	68	66	10 840		280
	323	596	148 638		281
3 258	502	7 041	72 236		282
	32	437	82 821		283
	282	442	98 741		284
	135	630	60 436		285
	259	330	68 743		286
-	61	806	9 462		287
1 088	2,179	70 477	334 646		288
-	3	60	418		289
3 048	4,216	111 325	589 665		290
27 443	48,359	701 562	4 716 854		(810)
-	90	4 289	12 255		291
76 247	6,290	237 979	573 513		292
6 824	1,739	64 592	179 613		293
-	77	4 363	6 695		294
605	42,865	2 654 458	830 337		295
50	500	24 101	99 805		296
8 590	336	17 477	67 731		297
33 118	6,036	316 998	660 271		298
1 113	40,977	2 380 157	1 203 105		299
15 631	12,082	604 585	328 114		300
	123	4 588	17 959		301
	54	1 718	10 397		302
1 115	1,240	56 768	22 225		303
14 839	9,708	330 541	1 099 957		304
	331	201 903	434 611		305
	40	6 716	17 403		306
	768	19 050	37 808		307
82 433	22,216	1 136 767	1 879 530		308
248 137	152,394	8 087 030	7 481 329		309



## SOUTHERN PACIFIC COMPANY - Pacific Lines

Annual Report to the Interstate Commerce Commission

Report for the Year ended December 31, 1929

## 541. REVENUE FREIGHT CARRIED DURING THE YEAR - Continued

Class No.	Commodity group or class (a)	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD							
		TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS					
		Number of carloads (b)	Number of tons (1,000 lb.) (c)	Number of carloads (d)	Number of tons (1,000 lb.) (e)				
GROUP IV. PRODUCTS OF FORESTS (C. L.)									
400	Logs	73,583	2	761	056	2,516	79	150	
401	Posts, poles, and piling	2,694		80	730	3,766	111	267	
402	Wood (fuel)	6,632		224	791	46		880	
403	Ties, railroad	424		17	529	382	15	356	
404	Pulpwood	7,611		242	949	4		180	
405	Lumber, shingles, and lath	27,929		890	658	40,508	1	213	087
406	Box, crate, and cooperage materials	9,010		213	736	3,719		90	046
407	Veneer and built-up wood	672		18	444	841		22	815
408	Rosin	16			446	-		-	
409	Turpentine	15			243	5			131
410	Crude rubber (not reclaimed)	12			361	167		5	065
411	Products of forests, n. o. s.	442		8	104	316		6	678
412	TOTAL PRODUCTS OF FORESTS	129,040	4	458	989	52,270	1	544	655
GROUP V. MANUFACTURES AND MISCELLANEOUS (C. L.)									
420	Petroleum oils, refined, and all other gasolines	23,058		701	886	7,060	207	312	
421	Fuel, road, and petroleum residual oils, n. o. s.	21,159		909	225	6,287	259	367	
422	Lubricating oils and greases	4,395		114	071	1,306	28	725	
423	Petroleum products, n. o. s.	67		1	596	5		72	
424	Cottonseed oil	1,053		33	125	179	5	328	
425	Linseed oil	298		5	744	93	2	828	
426	Vegetable oils, n. o. s.	331		9	849	1,613	49	223	
427	Sugar (beet or cane)	8,514		331	292	5,779	201	528	
428	Table syrups and edible molasses	18			348	21		604	
429	Molasses, blackstrap and beet resid	1,551		100	354	64	2	786	
430	Iron, pig	133		6	906	-	-	-	
431	Iron and steel, rated 6th class in official classification, n. o. s.	60		2	636	1		28	
432	Rails; fastenings, frogs, and switches	332		12	892	200	8	433	
433	Cast-iron pipe and fittings	293		7	104	15		356	
434	Iron and steel pipe and fittings, n. o. s.	1,245		33	113	229	4	570	
435	Iron and steel: Nails and wire, not woven	1,031		33	541	185	5	520	
436	Iron and steel, rated 6th class in official classification, n. o. s. (also in and term plate)	6,376		203	931	882	24	835	
437	Copper: Ingot, matte, and pig	313		17	771	1,043	55	881	
438	Copper, brass, and bronze: Bar, sheet, and pipe	2,459		146	197	2,308	123	835	
439	Lead and zinc: Ingot, pig, or bar	356		14	757	156	7	176	
440	Aluminum: Ingot, pig, or slab	11			248	-	-	-	
441	Machinery and boilers	759		13	213	574	12	547	
442	Cement, natural or Portland (building)	11,139		452	915	2,712	121	184	
443	Brick, common	132		3	803	13		433	
444	Brick, n. o. s., and building tile	920		26	163	78	2	220	
445	Artificial stone, n. o. s.	45		1	617	22		574	
446	Lime, common (quick or slaked)	1,223		37	361	708	29	277	
447	Plaster (stucco or wall) and dry kalsomine	937		21	520	159	3	589	
448	Sewer pipe and drain tile (not metal)	413		7	362	108	1	943	
449		61			736	71		547	

## 541. REVENUE FREIGHT CARRIED DURING THE YEAR - Continued

REVENUE FREIGHT RECEIVED FROM CONNECTING CARRIERS				TOTAL REVENUE FREIGHT CARRIED	
TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS		Number of carloads (f)	Number of tons (1,000 lb.) (g)
Number of carloads (1)	Number of tons (1,000 lb.) (2)	Number of carloads (3)	Number of tons (1,000 lb.) (4)		
8,345	286 756	14	521	84,458	3 127
806	22 315	251	6 996	7,517	222
892	27 777	9	292	7,579	255
128	4 625	479	15 731	1,413	5
394	13 126	-	-	8,009	254
13,456	407 379	13,210	379 166	95,103	2 896
4,153	92 625	952	21 813	17,834	418
1,167	34 801	365	11 767	3,045	87
7	226	1	5	24	-
29	793	5	127	54	-
11	340	3	121	393	-
804	16 970	228	5 731	1,790	1
30,192	909 793	15,517	442 470	227,019	7 35
5,389	153 959	600	17 174	36,107	1 08
5,478	237 007	455	17 596	33,379	1 42
873	18 706	256	6 682	6,830	16
109	2 499	2	45	183	-
765	23 585	108	3 343	2,105	6
115	3 130	21	611	427	1
207	6 453	318	9 734	2,469	7
727	32 500	152	6 065	15,172	57
546	19 146	31	919	616	2
281	13 460	7	231	2,203	11
621	35 873	300	17 317	1,054	6
5	120	-	-	66	-
167	8 245	55	2 456	754	3
283	10 012	11	383	602	2
1,048	36 914	168	6 118	2,690	8
252	9 125	34	1 343	1,502	4
5,587	229 851	570	20 178	13,415	47
245	13 602	1,126	61 459	2,727	14
18	484	1	444	4,797	27
302	14 970	48	2 410	862	-
-	-	1	20	12	-
1,290	28 285	381	7 567	3,004	-
1,715	70 786	728	38 051	16,294	6
10	338	1	32	156	-
354	13 084	98	3 498	1,450	-
3	82	-	-	70	-
565	13 553	5	138	2,501	-
1,875	44 594	197	5 788	3,168	-
98	2 324	12	257	631	-
359	7 035	75	1 246	530	-

Report for the Year ended December 31, 1939

## 541. REVENUE FREIGHT CARRIED DURING THE YEAR—Continued

REVENUE FROM CONNECTING CARRIERS				TOTAL REVENUE FREIGHT CARRIED				Freight revenue (dollars)			Class No.
Line	DELIVERED TO CONNECTING CARRIERS		Number of carloads (j)	Number of tons (2,000 lb.) (k)	Number of carloads (l)	Number of tons (2,000 lb.) (m)	(n)	(o)	(p)		
	Number of carloads (b)	Number of tons (1,000 lb.) (c)									
756	14	521	84,458	3	127	483	1	398	994	400	
375	257	6,996	7,517	221	368		1	109	181	401	
777	9	292	7,579	255	742			171	520	402	
625	479	15,931	1,413	53	441			227	949	410	
126	-	-	8,009	256	255			224	989	408	
379	13,210	379,166	95,103	2	890	290	12	623	307	400	
625	952	21,813	17,834	418	220		2	380	775	401	
801	365	11,767	3,045	87	827			547	670	403	
226	1	5	24		677			4	224	400	
793	5	127	54	1	294			14	201	401	
340	3	121	193	5	827			59	681	403	
970	228	5,731	1,790	37	483			212	295	400	
793	15,517	442,470	227,019	7	355	907	18	975	486	(100)	
959	600	17,174	36,107	1	080	331	4	067	746	400	
007	455	17,596	33,379	1	423	195	5	361	950	401	
706	256	6,682	6,830	168	184			631	794	402	
499	2	45	183	4	212			25	375	403	
585	108	3,343	2,105	65	381			414	153	400	
130	21	611	427	12	313			51	657	401	
453	318	9,734	2,469	75	259			424	179	403	
500	152	6,065	15,172	571	385		2	364	327	470	
146	31	919	616	21	017			158	688	471	
460	7	231	2,203	116	831			240	388	472	
873	300	17,317	1,054	60	096			185	357	400	
120	-	-	66	2	784			5	248	401	
245	55	2,456	754	32	026			227	906	400	
012	11	383	602	17	855			98	027	410	
914	168	6,118	2,690	80	715			534	864	411	
125	34	1,343	1,502	49	529			230	949	412	
851	570	20,178	13,415	478	795		2	159	361	413	
602	1,126	61,459	2,727	148	713			496	712	400	
484	1	444	4,797	270	960			677	636	401	
970	48	2,410	862	39	313			158	523	402	
	1	20	12		268			1	206	403	
285	381	7,567	3,004	61	612			696	792	400	
786	728	38,051	16,294	682	936		1	719	414	400	
338	1	32	156	4	606			8	800	400	
084	98	3,498	1,450	44	965			156	356	401	
82	-	-	70	2	273			9	367	402	
551	5	138	2,501	80	327			215	096	400	
594	197	5,788	3,168	75	491			178	538	401	
324	12	257	631	11	086			90	287	470	
035	75	1,246	530	9	564			131	635	400	
142	1	14	38		370			5	137	401	
421	103	2,160	1,255	27	280			295	264	472	
			140	5	780			19	726	400	



	(a)	Number of carloads (b)	Number of tons (2,000 lb.) (c)	Number of carloads (d)	Number of tons (2,000 lb.) (e)
<b>GROUP IV. PRODUCTS OF FORESTS (C. L.)</b>					
Logs	73,583	2	761 056	2,516	79 150
Posts, poles, and piling	2,694		80 730	3,766	111 267
Wood (fuel)	6,632		224 793	46	880
Ties, railroad	424		17 529	382	15 356
Pulpwood	7,611		242 949	4	180
Lumber, shingles, and lath	27,929		890 658	40,508	1 213 087
Box, crate, and cooperage materials	9,010		213 736	3,719	90 046
Veneer and built-up wood	672		18 444	841	22 815
Resin	16		446	-	-
Turpentine	15		243	5	131
Crude rubber (not reclaimed)	12		301	167	5 065
Products of forests, n. o. s.	442		8 104	116	6 678
<b>TOTAL PRODUCTS OF FORESTS</b>	<b>129,040</b>	<b>4</b>	<b>458 989</b>	<b>52,270</b>	<b>1 544 655</b>
<b>GROUP V. MANUFACTURES AND MISCELLANEOUS (C. L.)</b>					
Petroleum oils, refined, and all other gasolines	23,058		701 886	7,060	207 312
Fuel, road, and petroleum residual oils, n. o. s.	21,159		909 225	6,287	259 367
Lubricating oils and greases	4,395		114 071	1,306	28 725
Petroleum products, n. o. s.	67		1 596	5	72
Cottonseed oil	1,053		33 125	179	5 328
Linseed oil	198		5 744	93	2 828
Vegetable oils, n. o. s.	331		9 849	1,613	49 223
Sugar (beet or cane)	8,514		331 292	5,779	201 528
Table sirups and edible molasses	18		348	21	604
Molasses, blackstrap and beet residual	1,851		100 354	64	2 786
Iron, pig	133		6 906	-	-
Iron and steel, rated 6th class in official classification, n. o. s.	60		2 636	1	28
Rails, fastenings, frogs, and switches	332		12 892	200	8 433
Cast-iron pipe and fittings	293		7 104	15	356
Iron and steel pipe and fittings, n. o. s.	1,245		33 113	229	4 570
Iron and steel: Nails and wire, not woven	1,031		33 541	185	5 520
Iron and steel, rated 6th class in official classification, n. o. s. (also tin and terno plate)	6,376		203 931	882	24 835
Copper: Ingot, matte, and pig	313		17 771	1,043	55 881
Copper, brass, and bronze: Bar, sheet, and pipe	2,459		146 197	2,308	123 835
Lead and zinc: Ingot, pig, or bar	356		14 757	156	7 176
Aluminum: Ingot, pig, or slab	11		246	-	-
Machinery and boilers	757		13 213	574	12 547
Cement, natural or Portland (building)	11,139		452 915	2,712	121 184
Brick, common	132		3 803	13	433
Brick, n. o. s., and building tile	920		26 163	78	2 220
Artificial stone, n. o. s.	45		1 617	22	574
Lime, common (quick or slaked)	1,223		37 361	708	29 277
Plaster (stucco or wall) and dry kalsomine	937		21 520	159	3 589
Sewer pipe and drain tile (not metal)	413		7 362	108	1 943
Agricultural implements and parts, n. o. s.	61		736	35	547
Vehicles, horse-drawn, and parts, n. o. s.	13		190	9	114
Tractors and parts	219		3 739	92	1 960
Railway car wheels, axles, and trucks	116		4 217	33	976
Automobiles (passenger)	11,327		69 862	6,302	38 366
Autotrucks	1,860		11 892	1,429	9 439
Automobiles and autotrucks, K. D. and parts, n. o. s.	376		7 293	114	2 822
Automobile and autotruck tires	570		10 592	340	6 522
Furniture, metal	341		3 504	163	1 814
Furniture, other than metal	1,126		8 372	350	2 959
Beverages	3,683		95 954	4,015	112 673
<b>Carried forward</b>	<b>108,513</b>	<b>3</b>	<b>467 402</b>	<b>44,682</b>	<b>1 338 366</b>

† Not required from switching and terminal companies.

STEAM RAILWAY CORPORATION—OPERATING—A

Number of carloads (f)	Number of tons (2,000 lb.) (g)	Number of carloads (h)	Number of tons (2,000 lb.) (i)	Number of carloads (j)
8,345	286 756	14	521	84,458
806	22 375	251	6 996	7,517
892	29 777	9	292	7,579
128	4 625	479	15 931	1,413
394	13 126	-	-	8,009
13,456	407 379	13,210	379 166	95,103
4,153	92 625	952	21 813	17,834
1,167	34 801	365	11 767	3,045
7	226	1	5	24
29	793	5	127	54
11	340	3	121	193
804	16 970	228	5 731	1,790
30,192	909 793	15,517	442 470	227,019
5,389	153 959	600	17 174	36,107
5,478	237 007	455	17 596	33,379
873	18 706	256	6 682	6,830
109	2 499	2	45	183
765	23 585	108	3 343	2,105
115	3 130	21	611	427
207	6 453	318	9 734	2,469
727	32 500	152	6 065	15,172
546	19 146	31	919	616
281	13 460	7	231	2,203
621	35 873	300	17 317	1,054
5	120	-	-	66
167	8 245	55	2 456	754
283	10 012	11	383	602
1,048	26 914	168	6 118	2,690
252	9 125	34	1 343	1,502
5,587	229 851	570	20 178	13,415
245	13 602	1,126	61 459	2,727
18	484	1	444	4,797
302	14 970	48	2 410	862
-	-	1	20	12
1,290	28 285	381	7 567	3,004
1,715	70 786	728	38 051	16,294
10	338	1	32	156
354	13 084	98	3 498	1,450
3	82	-	-	70
565	13 551	5	138	2,501
1,875	44 594	197	5 788	3,168
98	2 324	12	257	631
359	7 035	75	1 246	530
15	142	1	14	38
841	19 421	103	2 160	1,255
17	484	3	103	169
4,230	26 050	895	5 723	22,754
800	6 553	70	561	4,159
9,251	175 353	72	1 341	9,813
514	10 485	396	8 361	1,820
270	3 709	36	466	810
1,754	16 530	366	3 312	3,596
2,795	68 614	1,497	42 474	11,970
49,754	1 377 061	9,211	295 620	212,160

STEAM RAILWAY CORPORATION—OPERATING—A

† Not required from switching and terminal companies.

	Number of carloads (a)	Weight in tons (b)	Carloads (c)	Weight in tons (d)	Weight in tons (e)	Weight in tons (f)	Weight in tons (g)
756	14	521	84,458	1	127	483	1 398 994
375	251	6 996	7,527		221	368	1 109 181
777	9	292	7,579		255	742	171 520
625	479	15 931	1,413		53	441	227 949
126	-	-	8,009		256	255	224 989
379	13,210	379 166	95,103	2	890	290	12 623 307
625	952	21 813	17,834		418	220	2 360 715
801	365	11 767	3,045		87	827	547 610
226	1	5	24			677	4 724
793	5	127	54		1	294	14 201
340	3	121	193		5	827	59 681
970	226	5 731	1,790		37	493	212 295
793	15,517	442 470	227,019	7	355	907	18 975 486
959	600	17 174	36,107	1	080	331	4 067 746
007	455	17 596	33,379	1	423	195	5 361 950
706	256	6 682	6,830		168	184	631 794
499	2	45	183		4	212	25 375
585	108	3 343	2,105		65	381	414 153
130	21	611	427		12	313	51 657
453	218	9 734	2,469		75	259	424 179
500	152	6 065	15,172		571	385	2 364 327
146	31	919	616		21	017	158 688
460	7	231	2,203		116	831	240 388
873	300	17 317	1,054		60	096	185 357
120	-	-	66		2	784	5 248
245	55	2 456	754		32	026	227 906
012	11	383	602		17	855	98 027
914	168	6 118	2,690		80	715	534 864
125	34	1 343	1,502		49	529	230 949
851	570	20 178	13,415		478	795	2 159 361
602	1,126	61 459	2,727		148	713	496 712
484	12	444	4,797		270	960	677 636
970	48	2 410	862		39	313	158 523
	1	20	12			268	1 206
285	381	7 567	3,004		61	612	696 792
786	728	38 051	16,294		682	936	1 719 414
338	1	32	156		4	606	8 800
084	98	3 498	1,450		44	965	156 356
82	-	-	70		2	273	9 387
551	5	138	2,501		80	327	215 096
594	197	5 788	3,168		75	491	178 538
324	12	257	631		11	886	50 287
035	75	1 246	530		9	564	131 635
142	1	14	38			370	5 137
421	103	2 160	1,255		27	280	295 264
484	3	103	169		5	780	19 726
050	895	5 723	22,754		140	002	2 593 437
553	10	561	4,159		28	445	481 829
353	72	1 341	9,813		186	809	2 155 997
485	396	8 361	1,820		35	960	368 944
709	36	466	810		9	493	107 281
530	366	3 382	3,596		31	773	523 659
614	1,497	42 474	11,970		319	715	2 103 212
061	9,211	295 620	212,160	6	478	449	30 336 837



## SOUTHERN PACIFIC COMPANY - Pacific Lines

Report for the Year ended December 31, 1939

## 541. REVENUE FREIGHT CARRIED DURING THE YEAR—Concluded

Class No.	Commodity group or class	REVENUE FREIGHT ORIGINATING IN RESPONDENT'S ROAD					
		TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS			
		Number of carloads (a)	Number of tons (2,000 lb.) (b)	Number of carloads (c)	Number of tons (2,000 lb.) (d)	Number of carloads (e)	Number of tons (2,000 lb.) (f)
	GROUP V. MANUFACTURES AND MISCELLANEOUS (C. L.)—Cont.						
	Brought forward	108,513	3 467 402	44,682	1 338 366		
000	Ice	3,133	70 562	39	883		
000	Fertilizers, n. o. s.	2,438	70 627	419	10 992		
000	Newsprint paper	345	7 633	203	6 555		
000	Printing paper, n. o. s.	336	7 437	109	2 599		
000	Alcohol, denatured or wood	127	2 635	13	220		
000	Sulphuric acid	3,398	166 811	15	397		
000	Explosives, n. o. s.	419	7 480	622	11 003		
000	Cotton cloth and cotton fabrics, n. o. s.	66	955	50	723		
000	Bagging and bags, burlap, gunny, or jute	400	7 712	255	5 384		
000	Canned food products, n. o. s.	8,752	204 121	7,830	237 880		
000	Tobacco, manufactured products	15	305	20	360		
000	Paints in oil and varnishes	349	7 095	197	4 130		
000	Furnace slag	37	1 689	1	51		
000	Scrap iron and scrap steel	5,124	233 283	335	15 262		
000	Paper bags and wrapping paper	893	18 081	1,005	23 199		
000	Paperboard, pulpboard, and wallboard (paper)	569	14 131	36	840		
000	Building paper and prepared roofing materials	1,687	34 635	570	12 938		
000	Building woodwork (millwork)	559	8 256	1,118	24 590		
000	Soap and washing compounds	958	19 070	323	7 050		
000	Glass, flat, other than plate	8	101	-	-		
000	Glass: Bottles, jars, and jelly glasses	3,510	76 083	1,448	25 452		
000	Manufactures and miscellaneous, n. o. s.	50,436	1 025 015	12,302	281 407		
000	TOTAL MANUFACTURES AND MISCELLANEOUS	192,072	5 452 029	71,592	2 010 282		
000	GRAND TOTAL, CARLOAD TRAFFIC	532,503	17 679 798	312,867	6 735 105		
	GROUP VI. L. C. L. FREIGHT						
700	All L. C. L. freight	.....	445 201	.....	118 960		
000	GRAND TOTAL, CARLOAD AND L. C. L. TRAFFIC	.....	18 124 999	.....	6 854 065		
701-A	Forwarder traffic included in Class 701*	1,654	19 737	250	4 000		

Note.—Gross charges for protective services to perishable freight, without deduction for any proportion thereof credited to account No. 101, "Freight":

(a) Charges for service for the protection against heat

\$ 5,487,519

(b) Charges for service for the protection against cold

\$ 4,426

Note:

Statement of tonnage and revenue by commodity of revenue freight for Southern Pacific Steamship Lines is given on pages 519 A and 519 B.

## 541. REVENUE FREIGHT CARRIED DURING THE YEAR—Concl

Class No.	Commodity group or class	REVENUE FREIGHT RECEIVED FROM CONNECTING CARRIERS					
		TERMINATING ON LINE		DELIVERED TO CONNECTING CARRIERS			
		Number of carloads (a)	Number of tons (2,000 lb.) (b)	Number of carloads (c)	Number of tons (2,000 lb.) (d)	Number of carloads (e)	Number of tons (2,000 lb.) (f)
		49,754	1 377 061	9,211	295 620	212,160	6
		4,276	202 395	1,891	91 782	3,172	
		150	4 288	123	3 271	9,024	
		890	21 177	30	682	821	
		85	2 327	3	69	1,365	
		193	9 846	79	3 943	228	
		421	6 265	185	2 909	3,685	
		298	5 639	114	2 423	1,647	
		28	634	7	119	528	
		2,297	66 655	703	21 630	690	
		1,309	27 638	29	582	19,582	
		263	4 558	43	1 230	1,373	
		1	50	-	-	752	
		237	11 538	17	799	39	
		684	15 113	65	1 598	5,713	
		712	18 298	197	5 627	2,647	
		194	4 879	60	1 631	1,514	
		390	9 609	187	5 043	2,511	
		255	5 597	37	873	2,254	
		258	9 104	114	4 423	1,573	
		243	4 264	219	3 806	380	
		31,180	666 281	5,406	166 295	5,420	
		24,018	2 473 216	18,720	614 355	99,324	2
		206,086	6 721 033	74,170	1 893 343	376,402	10
						1,125,626	33
		.....	79 347	.....	14 877	.....	6
		.....	6 800 380	.....	1 908 220	.....	33
		5,757	81 020	38	524	7,699	1



Report for the Year ended December 31, 1939

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## 541. REVENUE FREIGHT CARRIED DURING THE YEAR—Concluded

RECEIVED FROM CONNECTING CARRIERS			TOTAL REVENUE FREIGHT CARRIED		Freight revenue (dollars)			Class No.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	Number of carloads (b)	Number of tons (1,000 lb.) (c)	Number of carloads (d)	Number of tons (1,000 lb.) (e)	Freight revenue (dollars) (f)			Class No.
7 061	9,211	295 620	212,160	6 478 449	30	336 837		
2 395	1,891	91 782	3,172	71 445		81 110		
4 288	123	3 271	9,024	375 796	1	216 541		
1 177	30	682	821	21 747		147 417		
2 327	3	69	1,365	31 895		245 887		
9 846	79	3 943	3,685	5 251		19 214		
6 265	189	2 909	1,647	180 997		345 592		
5 639	114	2 423	528	27 657		276 845		
634	7	119	690	9 740		90 662		
6 655	703	21 630	19,582	13 849		83 537		
7 638	29	582	1,373	530 286	3	063 497		
4 558	43	1 230	752	28 885		350 749		
50	-	-	39	16 923		118 593		
1 538	17	799	5,713	1 790		3 724		
5 113	65	1 598	2,647	260 882		525 178		
8 298	197	5 627	1,514	57 991		454 006		
4 879	60	1 631	2,511	38 896		188 291		
9 609	187	5 043	2,254	54 084		299 224		
5 597	37	873	1,273	47 498		284 253		
9 104	114	4 423	380	32 590		196 011		
4 264	219	3 806	5,420	13 628		98 359		
6 281	5,406	166 295	99,324	109 605		422 149		
3 216	18,720	614 355	376,402	2 138 998	11	568 563		
1 033	74,170	1 893 343	1,125,626	10 548 882	50	416 237		
				33 029 279	123	909 249		
9 347	.....	14 877	.....	658 385	9	669 888		
10 380	.....	1 908 220	.....	687 664	133	579 137		
1 020	38	524	7,699	105 281	1	360 643		

# 341. REVENUE FREIGHT CARRIED DURING THE YEAR—WITHIN THE STATE\*

Give the particulars called for concerning the commodities carried on the respondent's road during the year, the revenue from which is includible in account No. 101, "Freight", classifying them in accordance with the Interstate Commerce Commission's Order in the Matter of Freight Commodity Statistics, effective January 1, 1928, as amended by order of December 14, 1928.

In stating the number of tons received from connecting carriers, include all shipments that, so far as apparent from the information on the waybills or abstracts of waybills, have been received from connecting rail carriers either directly or indirectly. Shipments from boat lines should also be included when identified as having had previous rail transportation by United States rail carriers or as moving on joint through bills of lading by coastwise water carriers and railways.

Tonnage originating on switching roads connecting directly or indirectly with respondent's line should be regarded as tonnage originating by respondent. Import traffic and traffic from outlying possessions of the United States received from water carriers should be regarded as originating at the port of entry. All other tonnage should be treated as originating on line, including finished products from transit points.

If the application of these instructions results in any marked deviation from the respondent's past practice, that fact should be stated in a footnote in order that proper allowance can be made in interpreting the statistics.

Particulars for Classes Nos. 10 to 701 should include carload traffic only, all less than carload traffic being included in Class No. 710.

Information as to carloads and tons of forwarder traffic included in Class 701 should be reported against commodity class designated 701-A. To avoid undue clerical labor, Class 701-A may be restricted to the principal forwarding companies or their subsidiaries originating in the aggregate not less than approximately 80 percent of such traffic landed on respondent's line. The term "Forwarder traffic" is defined in the third paragraph of instructions for schedule No. 341 on page No. 312.

Class No.	Commodity (a)	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD WITHIN THE STATE		ALL OTHER REVENUE FREIGHT CARRIED WITHIN THE STATE		TOTAL REVENUE FREIGHT CARRIED WITHIN THE STATE		TOTAL REVENUE FREIGHT TERMINATING ON RESPONDENT'S ROAD WITHIN THE STATE			
		Number of carloads (b)	Number of tons (1,000 lb.) (c)	Number of carloads (d)	Number of tons (1,000 lb.) (e)	Number of carloads (f)	Number of tons (1,000 lb.) (g)	Number of carloads (h)	Number of tons (1,000 lb.) (i)		
GROUP I. PRODUCTS OF AGRICULTURE (C. L.)											
10	Wheat	36	1 460	410	21 528	446	22 988	81	3 632		
20	Corn	56	1 862	564	23 368	620	25 230	117	4 593		
30	Oats	1	40	37	1 161	38	1 201	11	365		
40	Barley and rye	5	210	98	4 288	103	4 498	9	367		
41	Rice	-	-	534	17 122	534	17 122	17	580		
42	Grain, n. o. s.	-	-	5	158	5	158	-	-		
50	Flour, wheat	38	441	647	17 023	685	17 464	588	14 366		
51	Meal, corn	-	-	23	652	23	652	8	222		
52	Flour and meal, edible, n. o. s.	-	-	10	279	10	279	8	216		
60	Cereal food preparations, edible, n. o. s.	2	75	465	6 927	467	7 002	81	1 395		
61	Mill products, n. o. s.	534	15 548	576	16 348	1,110	31 896	188	5 270		
70	Hay and alfalfa	787	9 698	6	65	793	9 763	95	1 290		
71	Straw	22	285	14	420	36	705	5	62		
80	Tobacco, leaf	-	-	71	1 439	71	1 439	-	-		
90	Cotton in bales	4,439	65 668	701	18 548	5,140	84 216	2 781	26 913		
91	Cotton linters, nolls, and regins	180	4 438	17	338	197	4 826	-	-		
100	Cottonseed	878	28 922	43	1 159	921	30 081	849	27 930		
101	Cottonseed meal and cake	649	21 002	6	182	655	21 184	6	176		
110	Oranges and grapefruit	1,189	19 124	17,427	314 100	18,616	333 224	7	108		
111	Lemons, limes, and citrus fruits, n. o. s.	3	53	9,210	156 935	9,213	156 988	2	32		
120	Apples, fresh	-	-	342	6 198	342	6 198	102	1 714		
121	Bananas	-	-	297	3 359	297	3 359	272	3 070		
122	Berries, fresh	4	40	-	-	4	40	-	-		
123	Cantaloupes and melons, n. o. s.	2,290	27 584	9,095	100 399	11,385	127 983	-	-		
124	Grapes, fresh	3	35	1,683	26 595	1,686	26 630	14	147		
125	Peaches, fresh	-	-	83	1 122	83	1 122	15	208		
126	Watermelons	-	-	152	1 901	152	1 901	11	136		
127	Fruits, fresh, domestic, n. o. s.	1	21	349	5 131	350	5 152	6	104		
128	Fruits, fresh, tropical, n. o. s.	1	9	63	905	64	914	2	19		
130	Potatoes, other than sweet	15	169	1,758	28 605	1,773	28 774	196	2 986		
140	Cabbage	97	1 436	562	7 902	659	9 338	-	-		
141	Onions	-	-	334	5 065	334	5 065	4	61		
142	Tomatoes	-	-	2,456	28 144	2,456	28 144	4	50		
143	Vegetables, fresh, n. o. s.	9,103	109 852	32,141	387 013	41,244	496 865	150	1 693		
150	Beans and peas, dried	1	10	1,228	37 719	1,229	37 729	33	703		
151	Fruits, dried or evaporated	-	-	647	20 894	647	20 894	10	144		
152	Vegetables, dry, n. o. s.	-	-	33	573	33	573	1	17		
160	Vegetable-oil cake and meal, except cottonseed	1	34	20	708	21	742	5	126		
161	Flour	-	-	145	3 481	145	3 481	-	-		

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128	Fruits, fresh, tropical, n. o. s.	1	4	63	905	64	94	44
129	Potatoes, other than sweet	15	169	1,758	28 605	1,773	28 774	196
130	Cabbage	97	1 436	562	7 902	659	9 338	-
131	Onions	-	-	334	5 065	334	5 065	4
132	Tomatoes	-	-	2,456	28 144	2,456	28 144	4
133	Vegetables, fresh, n. o. s.	9,103	109 852	32,141	387 013	41,244	496 865	150
								1 693

134	Beans and peas, dried	1	10	1,228	37 719	1,229	37 729	33	703
135	Fruits, dried, or evaporated	-	-	647	20 894	647	20 894	10	144
136	Vegetables, dry, n. o. s.	-	-	33	573	33	573	1	17
137	Vegetable-oil cake and meal, except cottonseed	1	34	20	708	21	742	5	126
138	Peas	-	-	185	3 481	185	3 481	-	-
139	Flaxseed	93	2 846	-	-	93	2 846	-	-
140	Sugar beets	99	3 403	4	101	103	3 504	-	-
141	Products of agriculture, n. o. s.	240	5 290	1,676	47 823	1,916	53 113	125	2 989
142	TOTAL PRODUCTS OF AGRICULTURE	20,767	319 605	83,972	1 315 678	104 739	1 635 283	5,803	101 694
GROUP II. ANIMALS AND PRODUCTS (C. I.)									
143	Horses, mules, ponies, and asses	174	2 004	84	970	258	2 974	20	237
144	Cattle and calves, single-deck	6,052	67 030	5,049	55 969	11,101	122 999	3,299	37 464
145	Calves, double-deck	387	5 075	419	6 187	806	11 262	83	1 070
146	Sheep and goats, single-deck	11	93	19	147	30	240	16	141
147	Sheep and goats, double-deck	542	6 931	362	4 468	904	11 399	290	5 177
148	Hogs, single-deck	-	-	25	214	25	214	6	49
149	Hogs, double-deck	-	-	628	8 709	628	8 709	211	3 113
150	Fresh meats, n. o. s.	226	2 165	132	1 822	358	3 987	309	3 053
151	Meats, cured, dried, or smoked	6	51	121	2 511	127	2 562	43	641
152	Butterine and margarine	-	-	31	392	31	392	-	-
153	Packing-house products, edible, n. o. s., not including canned meats	19	210	242	3 132	261	3 342	212	2 533
154	Poultry, live	-	-	9	68	9	68	-	-
155	Poultry, dressed	-	-	52	748	52	748	-	-
156	Eggs	-	-	50	666	50	666	2	24
157	Butter	-	-	48	642	48	642	3	46
158	Cheese	-	-	67	959	67	959	13	165
159	Wool	13	217	4	71	17	288	-	-
160	Hides, green	41	1 417	97	3 384	138	4 801	-	-
161	Leather	-	-	5	81	5	81	-	-
162	Fish or sea-animal oil	-	-	421	11 864	421	11 864	-	-
163	Animals, live, n. o. s.	-	-	-	-	-	-	-	-
164	Animal products, n. o. s. (other than fertilizer and fertilizer materials)	66	1 662	599	16 078	665	17 740	20	529
165	TOTAL ANIMALS AND PRODUCTS	7,537	86 855	8,464	119 082	16,001	205 937	4,527	54 242
GROUP III. PRODUCTS OF MINES (C. I.)									
166	Anthracite coal	-	-	89	4 263	89	4 263	89	4 263
167	Bituminous coal	-	-	678	21 379	678	21 379	658	20 716
168	Coke	-	-	381	14 327	381	14 327	88	3 241
169	Iron ore	1	56	-	-	1	56	1	56
170	Copper ore and concentrates	17,963	1 002 484	24,557	1 631 162	42,520	2 633 646	42,476	2 631 504
171	Lead ore and concentrates	372	18 754	2	84	374	18 838	1	47
172	Zinc ore and concentrates	137	7 490	98	5 277	235	12 767	-	-
173	Ors and concentrates, n. o. s.	3 544	196 061	943	48 907	4,487	244 968	1,413	79 164
174	Gravel and sand (other than glass or molding)	142	7 716	58	3 105	200	10 821	84	4 477
175	Stone, broken, ground, or crushed	36	2 081	14	580	50	2 661	40	2 192
176	Stone, rough, n. o. s.	10	308	7	251	17	559	-	-
177	Stone, finished, n. o. s.	-	-	13	566	13	566	1	46
178	Petroleum, crude	1	31	30	1 110	31	1 141	1	25
179	Carried forward	22,206	1 234 981	26,870	1 731 011	49,076	2 965 992	44,852	2 745 731

\* Not required from switching and terminal companies.

† Trans-State traffic may be given in a footnote without subdivision by commodities, but if possible by direction of movement.

## 941. REVENUE FREIGHT CARRIED DURING THE YEAR—WITHIN THE STATE—Concluded

Class No.	Commodity	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD WITHIN THE STATE		ALL OTHER REVENUE FREIGHT CARRIED WITHIN THE STATE		TOTAL REVENUE FREIGHT CARRIED WITHIN THE STATE		TOTAL REVENUE FREIGHT TERMINATING ON RESPONDENT'S ROAD WITHIN THE STATE	
		Number of carloads (b)	Number of tons (2,000 lb.) (c)	Number of carloads (d)	Number of tons (2,000 lb.) (e)	Number of carloads (f)	Number of tons (2,000 lb.) (g)	Number of carloads (h)	Number of tons (2,000 lb.) (i)
	GROUP III. PRODUCTS OF MINES (C. L.)—Cont'd.								
	Brought forward.	22,206	1 234 981	26,870	1 731 011	49,076	2 965 992	44,852	2 745 731
279	Asphalt (natural, byproduct, or petroleum)	-	-	672	24 539	672	24 539	529	19 456
280	Salt	-	-	251	7 960	251	7 960	219	6 993
281	Phosphate rock, crude (ground or not ground)	-	-	1	30	1	30	-	-
282	Sulphur (brimstone)	-	-	48	2 179	48	2 179	4	176
283	Products of mines, n. o. s.	338	17 607	1,839	81 501	2,177	99 108	345	18 173
284	TOTAL PRODUCTS OF MINES	22,544	1 252 588	29,682	1 847 220	52,226	3 099 808	45,929	2 790 529
	GROUP IV. PRODUCTS OF FORESTS (C. L.)								
285	Logs	-	-	-	-	-	-	-	-
286	Posts, poles, and piling	3	45	1,955	69 977	1,958	70 022	1,312	46 078
287	Wood (fuel)	4	160	13	580	17	740	17	740
288	Ties, railroad	-	-	339	11 661	339	11 661	89	3 231
289	Pulpwood	-	-	-	-	-	-	-	-
290	Lumber, shingles, and lath	26	591	5,839	158 327	5,865	158 918	1,517	40 327
291	Box, crate, and coope age materials	1	17	900	21 170	901	21 187	505	11 906
292	Veneer and built-up wood	1	5	182	5 151	183	5 156	47	1 313
293	Resin	-	-	8	230	8	230	-	-
294	Turpentine	-	-	35	957	35	957	1	22
295	Crude rubber (not reclaimed)	-	-	161	4 886	161	4 886	-	-
296	Products of forests, n. o. s.	3	82	335	7 670	338	7 752	44	785
297	TOTAL PRODUCTS OF FORESTS	38	900	9,767	280 609	9,805	281 509	3,532	104 402
	GROUP V. MANUFACTURES AND MISCELLANEOUS (C. L.)								
298	Petroleum oils, refined, and all other gasolines	1	15	5,167	148 731	5,168	148 746	4,784	139 113
299	Fuel, road, and petroleum residual oils, n. o. s.	1	25	10,208	447 451	10,209	447 476	9,680	427 499
300	Lubricating oils and greases	2	13	961	21 231	963	21 244	267	4 609
301	Petroleum products, n. o. s.	-	-	17	442	17	442	3	99
302	Cottonseed oil	375	11 543	777	23 928	1,152	35 471	4	75
303	Livseed oil	1	18	32	911	33	929	7	185
304	Vegetable oil, n. o. s.	1	30	1,249	38 364	1,250	38 394	26	786
305	Sugar (beet or cane)	1	5	2,318	83 450	2,319	83 455	285	7 476
306	Table sirups and edible molasses	-	-	330	11 130	330	11 130	37	1 294
307	Molasses, blackstrap and beet residual	-	-	44	1 973	44	1 973	20	914
308	Iron, pig	-	-	2	105	2	105	-	-
309	Iron and steel, rolled 4th class in official classification, n. o. s.	-	-	1	40	1	40	-	-
310	Rails, fastenings, frogs, and switches	2	89	268	12 661	270	12 750	57	2 446
311	Cast-iron pipe and fittings	-	-	142	4 882	142	4 882	62	2 168
312	Iron and steel pipe and fittings, n. o. s.	11	152	642	21 254	653	21 406	330	10 583
313	Iron and steel: Nails and wire, not woven	5	45	164	5 990	169	6 035	62	2 031
314	Iron and steel, rolled 4th class in official classification, n. o. s. (also tin and terplate)	54	1 222	3,021	124 059	3,075	125 281	333	10 262
315	Copper: Ingot, matte, and pig	1,172	65 339	791	44 054	1,963	109 393	298	17 054
316	Copper, brass, and bronze: Bar, sheet, and pipe	2,549	149 345	505	27 512	3,054	176 857	5	178

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317	Lead and zinc: Ingot, pig, or bar	46	1 778	150	7 187	196	8 965	-	-
318	Aluminum: Ingot, pig, or slab	-	-	-	-	-	-	-	-
319	Machinery and boilers	26	595	1,040	22 319	1,066	22 914	141	3 111
320	Cement, natural or Portland (building)	1	30	2,014	82 426	2,015	82 456	1,549	57 785
321	Brick, common	-	-	12	386	12	386	9	298
322	Brick n. o. s. and building tile	8	345	310	11 384	318	11 729	186	4 983



100	Iron, pig	-	-	1	40	-	12	750	57	2	446	
101	Iron and steel, read 6th class in official classification, n. o. s.	2	87	268	12	661	270	4	882	62	2	168
102	Rails, fastenings, frogs, and switches	-	-	142	4	882	142	21	406	330	10	583
103	Cast-iron pipe and fittings	11	152	642	21	254	653	6	035	62	2	031
104	Iron and steel pipe and fittings, n. o. s.	5	45	164	5	990	169	125	281	333	10	262
105	Iron and steel: Nails and wire, not woven	54	222	3,021	124	059	3,075	109	393	298	17	054
106	Iron and steel, read 6th class in official classification, n. o. s. (also tin and manganese)	1,172	339	791	44	054	1,963	176	857	5		178
107	Copper: Ingot, waste, and pig	2,549	149	345	27	512	3,054					
108	Copper, brass, and bronze: Bar, sheet, and pipe											

109	Lead and zinc: Ingot, pig, or bar	46	1	778	150	7	187	196	8	965			
110	Aluminum: Ingot, pig, or slab	26	595	1,040	22	319	1,066	22	914	141	3	111	
111	Machinery and boilers	1	30	2,014	82	426	2,015	82	456	1,549	59	785	
112	Cement, natural or Portland (building)	-	-	12	11	386	12	11	386	9		298	
113	Brick, common	8	345	310	11	384	318	11	729	186	6	983	
114	Brick, n. o. s., and building tile	27	1	157	1	29	28	1	186	27	1	157	
115	Artificial stone, n. o. s.	686	31	531	39	673	725	32	204	226	8	639	
116	Lime, common (quick or slaked)	72	2	003	247	6	266	319	8	269	199	4	570
117	Plaster (stucco or wall) and dry kalsomine	1	15	73	1	618	74	1	633	68	1	467	
118	Sewer pipe and drain tile (not metal)	3	21	238	4	463	241	4	484	25		419	
119	Agricultural implements and parts, n. o. s.	-	-	8		86	8		86	1		8	
120	Vehicles, horse-drawn, and parts, n. o. s.	14	230	429	9	651	443	9	881	42		828	
121	Tractors and parts	2	108	17		601	19		709	4		103	
122	Railway car wheels, axles, and trucks	2	14	2,178	13	407	2,180	13	421	778	4	699	
123	Automobile (passenger)	1	7	560	4	208	561	4	215	306		2	096
124	Autotrucks	-	-	3,131	61	012	3,131	61	012	2		21	
125	Automobiles and autotrucks, K. D. and parts, n. o. s.	1	6	706	15	341	707	15	347	7		93	
126	Automobile and autotruck tires	1	8	140	1	734	141	1	742	37		490	
127	Furniture, metal	1	5	1,252	11	441	1,253	11	446	197		1	775
128	Furniture, other than metal	7	52	2,572	66	501	2,579	66	553	538		11	062
129	Beverages	86	1	806	-	-	86	1	806	86		1	806
130	Ice	347	9	026	1,564	77	418	1,911	86	444	152	6	510
131	Fertilizers, n. o. s.	-	-	108	3	117	108	3	117	60		1	792
132	Newsprint paper	-	-	246	6	028	246	6	028	10		176	
133	Printing paper, n. o. s.	-	-	20		641	20		641	-		-	
134	Alcohol, denatured or wood	1,490	74	762	130	6	505	1,620	81	267	1,559	77	990
135	Sulphuric acid	295	7	408	83	1	295	378	8	703	166	3	623
136	Explosives, n. o. s.	-	-	332	6	264	332	6	264	10		252	
137	Cotton cloth and cotton fabrics, n. o. s.	1	9	72	1	651	73	1	660	36		787	
138	Bagging and bags, burlap, gunny, or jute	268	3	469	3,696	112	075	3,964	115	544	903	20	902
139	Canned food products, n. o. s.	-	-	958	20	267	958	20	267	-		-	
140	Tobacco, manufactured products	-	-	81	2	204	81	2	204	19		519	
141	Paints in oil and varnishes	-	-	1		50			50	-		-	
142	Furnace slag	445	21	194	218	11	209	663	32	403	112	5	105
143	Scrap iron and scrap steel	2	16	442	10	405	444	10	421	115		2	577
144	Paper bags and wrapping paper	1	10	369	9	467	370	9	477	50		1	337
145	Paperboard, pulpboard, and wallboard (paper)	1	5	246	5	616	247	5	621	157		3	218
146	Building paper and prepared roofing materials	-	-	427	8	962	427	8	962	53		1	020
147	Building woodwork (millwork)	2	10	309	6	110	311	6	120	206		3	770
148	Soap and washing compounds	-	-	311	11	389	311	11	389	18		651	
149	Glass, flat, other than plate	177	2	719	558	9	715	735	12	434	49		943
150	Glass: Bottles, jars, and jelly glasses	591	13	827	18,277	385	116	18,868	398	943	3,568	77	503
151	Manufactures and miscellaneous, n. o. s.	8,780	400	007	70,204	2,034	405	78,984	2,434	412	27,931	942	857
152	TOTAL MANUFACTURES AND MISCELLANEOUS	59,666	2,059	955	202,089	5,596	994	261,755	7,656	949	87,742	3,993	724
153	GRAND TOTAL, CARLOAD TRAFFIC												
154	GROUP VI. L. C. L. FREIGHT												
155	All L. C. L. freight	14	487			66	736		81	223		35	664
156	GRAND TOTAL, CARLOAD AND L. C. L. TRAFFIC	2	074	442		5	663	730	7	738	172	4	029
157	Forwarder traffic included in Class 701**	4	60	1,710		20	552	1,714	20	612	703	6	407

\*Not required from switching and terminal companies.  
\*\*Not required for Class 11 roads.

†Trans-State traffic may be given in a footnote without subdivision by commodities, but if possible by direction of movement.

\*\*Not required for Class 11 roads.

## 941. REVENUE FREIGHT CARRIED DURING THE YEAR—WITHIN THE STATE\*

Give the particulars called for concerning the commodities carried on the respondent's road during the year, the revenue from which is includible in account No. 101, "Freight", classifying them in accordance with the Interstate Commerce Commission's Order in the Matter of Freight Commodity Statistics, effective January 1, 1938, as amended by order of December 14, 1938.

In stating the number of tons received from connecting carriers, include all shipments that, so far as appears from the information on the waybills or abstracts of waybills, have been received from connecting rail carriers either directly or indirectly. Shipments from boat lines should also be included when identified as having had pre-

vious rail transportation, by United States rail carriers or as moving on joint through bills of lading by coastwise water carriers and railways.

Tonnage originating on switching roads connecting directly or indirectly with respondent's line should be regarded as tonnage originated by respondent. Import traffic and traffic from outlying possessions of the United States received from water carriers should be regarded as originating at the port of entry. All other tonnage should be treated as originating on line, including finished products from transit points.

If the application of these instructions results in any marked deviation from the

respondent's past practice, that fact should be stated in a footnote in order that proper allowance can be made in interpreting the statistics.

Particulars for Classes Nos. 10 to 701 should include carrier's traffic only, all less than carrier's traffic being included in Class No. 710.

Information as to carloads and tons of forwarder traffic included in Class 701 should be reported against commodity class designated 701-A. To avoid undue clerical labor, Class 701-A may be restricted to the principal forwarding companies or their subsidiaries originating in the aggregate not less than approximately 60 percent of total traffic handled on respondent's line. The term "Forwarder traffic" is defined in the third paragraph of instructions for schedule No. 941 on page No. 512.

Class No.	Commodity	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD WITHIN THE STATE			ALL OTHER REVENUE FREIGHT CARRIED WITHIN THE STATE			TOTAL REVENUE FREIGHT CARRIED WITHIN THE STATE			TOTAL REVENUE FREIGHT TERMINATING ON RESPONDENT'S ROAD WITHIN THE STATE		
		Number of carloads (a)	Number of tons (2,000 lb.) (b)		Number of carloads (c)	Number of tons (2,000 lb.) (d)		Number of carloads (e)	Number of tons (2,000 lb.) (f)		Number of carloads (g)	Number of tons (2,000 lb.) (h)	
	GROUP I. PRODUCTS OF AGRICULTURE (C. L.)												
10	Wheat	41	2	003	424	22	406	465	24	409	-	-	-
20	Corn	-	-	-	651	26	739	651	26	739	9	-	318
30	Oats	1	-	20	51	1	628	52	1	648	4	-	95
40	Barley and rye	-	-	-	100	4	329	100	4	329	-	-	-
41	Rice	-	-	-	522	16	740	522	16	740	-	-	-
42	Grain, n. o. s.	-	-	-	5	-	158	5	-	158	-	-	-
50	Flour, wheat	1	-	20	447	11	857	448	11	877	67	-	1 520
51	Meal, corn	-	-	-	26	7	742	26	-	742	-	-	-
52	Flour and meal, edible, n. o. s.	-	-	-	5	-	158	5	-	158	-	-	-
53	Cereal food preparations, edible, n. o. s.	-	-	-	500	7	799	500	7	799	-	-	-
61	Mill products, n. o. s.	1	-	20	1,107	31	132	1,108	31	152	71	-	1 738
70	Hay and alfalfa	-	-	-	84	1	267	84	1	267	37	-	570
71	Straw	-	-	-	26	-	587	26	-	587	-	-	-
80	Tobacco, leaf	-	-	-	71	1	439	71	1	439	-	-	-
90	Cotton in bales	25	-	308	911	23	557	936	23	865	-	-	-
91	Cotton linters, noils, and regins	-	-	-	103	2	397	103	2	397	-	-	-
100	Cottonseed	-	-	-	15	-	431	15	-	431	1	-	20
101	Cottonseed meal and cake	-	-	-	177	4	074	177	4	074	75	-	1 655
110	Oranges and grapefruit	-	-	-	17,691	318	431	17,691	318	431	3	-	52
111	Lemons, limes, and citrus fruits, n. o. s.	-	-	-	9,210	156	940	9,210	156	940	-	-	-
120	Apples, fresh	-	-	-	299	5	591	299	5	591	3	-	51
121	Bananas	-	-	-	767	8	491	767	8	491	1	-	11
122	Berries, fresh	-	-	-	5	-	49	5	-	49	-	-	-
123	Cantaloupes and melons, n. o. s.	-	-	-	11,384	127	963	11,384	127	963	-	-	-
124	Grapes, fresh	-	-	-	1,671	26	481	1,671	26	481	-	-	-
125	Peaches, fresh	-	-	-	70	-	939	70	-	939	-	-	-
126	Watermelons	-	-	-	125	1	569	125	1	569	2	-	24
127	Fruits, fresh, domestic, n. o. s.	-	-	-	349	5	144	349	5	144	-	-	-
128	Fruits, fresh, tropical, n. o. s.	-	-	-	64	-	917	64	-	917	-	-	-
130	Potatoes, other than sweet	-	-	-	1,664	27	430	1,664	27	430	5	-	87
140	Cabbage	-	-	-	640	9	038	640	9	038	-	-	-
141	Onions	-	-	-	336	5	109	336	5	109	-	-	-
142	Tomatoes	-	-	-	1,999	22	693	1,999	22	693	-	-	-
143	Vegetables, fresh, n. o. s.	-	-	-	40,852	492	318	40,852	492	318	-	-	-

Report for the Year ended December 31, 1938

STATE OF NEW MEXICO

SOUTHERN PACIFIC COMPANY - Pac.

Defendant's Exhibit No. 218 (With Jan. 29, 1941

130	Beans and peas, dried	17	488	1,190	36 720	1,207	37 208	1	10
144	Fruits, dried or evaporated	-	-	637	20 749	637	20 749	-	-



Exhibit No. 218 (Witness Masson)  
 n. 29, 1941

PACIFIC COMPANY - Pacific Lines

STATE OF NEW MEXICO

Report for the Year ended December 31, 1939

120	Fruits, fresh, tropical, n. o. s.	-	-	1,664	27,430	1,664	27,430	5	87
121	Potatoes, other than sweet	-	-	640	9,038	640	9,038	-	-
122	Cabbage	-	-	336	5,109	336	5,109	-	-
123	Onions	-	-	1,999	22,693	1,999	22,693	-	-
124	Tomatoes	-	-	40,852	492,318	40,852	492,318	-	-
125	Vegetables, fresh, n. o. s.	-	-	-	-	-	-	-	-

126	Beans and peas, dried	17	488	1,190	36,720	1,207	37,208	1	10
127	Fruits, dried or evaporated	-	-	637	20,749	637	20,749	-	-
128	Vegetables, dry, n. o. s.	-	-	32	556	32	556	-	-
129	Vegetable-oil cake and meal, except cottonseed	-	-	22	753	22	753	1	20
130	Peanuts	-	-	185	3,481	185	3,481	-	-
131	Flaxseed	-	-	-	-	-	-	-	-
132	Sugar beets	-	-	5	123	5	123	-	-
133	Products of agriculture, n. o. s.	-	-	1,742	48,986	1,742	48,986	-	-
134	TOTAL PRODUCTS OF AGRICULTURE	86	2,859	96,164	1,477,911	96,250	1,480,770	280	6,171
GROUP II. ANIMALS AND PRODUCTS (C. I.)									
135	Horses, mules, ponies, and asses	21	246	104	1,184	125	1,430	-	-
136	Cattle and calves, single-deck	2,231	23,025	6,111	65,502	8,342	88,527	244	2,638
137	Calves, double-deck	109	1,380	722	9,914	831	11,294	48	650
138	Sheep and goats, single-deck	17	124	22	173	39	297	2	12
139	Sheep and goats, double-deck	216	2,067	540	6,594	876	8,661	37	370
140	Hogs, single-deck	-	-	26	222	26	222	-	-
141	Hogs, double-deck	-	-	582	9,522	682	9,522	-	-
142	Fresh meats, n. o. s.	-	-	214	2,819	214	2,819	-	-
143	Meats, cured, dried, or smoked	-	-	237	5,215	337	5,215	-	-
144	Butterine and margarine	-	-	31	392	31	392	-	-
145	Packing-house products, edible, n. o. s., not including animal meats	-	-	263	3,258	263	3,258	-	-
146	Poultry, live	-	-	9	68	9	760	-	-
147	Poultry, dressed	-	-	53	760	53	760	-	-
148	Eggs	-	-	74	934	74	934	-	-
149	Butter	-	-	47	624	47	624	-	-
150	Cheese	-	-	69	978	69	978	-	-
151	Wool	37	616	16	283	53	899	-	-
152	Hides, green	-	-	119	4,837	139	4,837	-	-
153	Leather	-	-	62	62	4	62	-	-
154	Fish or sea-animal oil	-	-	421	11,865	421	11,865	1	5
155	Animals, live, n. o. s.	-	-	638	17,066	638	17,066	-	-
156	Animal products, n. o. s. (other than fertilizer and fertilizer materials)	-	-	-	-	-	-	-	-
157	TOTAL ANIMALS AND PRODUCTS	2,631	27,458	10,642	142,272	13,273	169,730	332	3,675
GROUP III. PRODUCTS OF MINES (C. L.)									
158	Anthracite coal	-	-	4,263	89	4,263	-	-	-
159	Bituminous coal	1,207	38,859	862	28,363	2,069	67,222	415	15,188
160	Coke	-	-	531	20,564	531	20,564	3	102
161	Iron ore	59	3,367	-	-	59	3,367	-	-
162	Copper ore and concentrates	252	15,380	374	25,564	709	40,944	5	182
163	Lead ore and concentrates	2	44	324	18,840	376	18,884	-	-
164	Zinc ore and concentrates	-	-	324	16,956	324	16,956	-	-
165	Ores and concentrates, n. o. s.	23	1,104	3,028	165,686	3,051	166,790	-	-
166	Gravel and sand (other than glass or molding)	-	-	71	3,811	71	3,811	11	636
167	Stone, broken, ground, or crushed	-	-	298	16,181	298	16,181	2	90
168	Stone, rough, n. o. s.	-	-	17	559	17	559	-	-
169	Stone, finished, n. o. s.	-	-	13	566	13	566	-	-
170	Petroleum, crude	3	140	1,172	53,656	1,175	53,796	1,166	52,581
171	Carried forward	1,546	58,894	7,236	355,009	8,782	413,903	1,582	63,879

\* Not required from packing and terminal companies.

† Trans-State traffic may be given in a footnote without subdividing by commodities, but if possible by direction of movement.



# 941. REVENUE FREIGHT CARRIED DURING THE YEAR—WITHIN THE STATE—Concluded

Class No.	Commodity	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD WITHIN THE STATE		ALL OTHER REVENUE FREIGHT CARRIED WITHIN THE STATE		TOTAL REVENUE FREIGHT CARRIED WITHIN THE STATE		TOTAL REVENUE FREIGHT TERMINATING ON RESPONDENT'S ROAD WITHIN THE STATE	
		Number of carloads (a)	Number of tons (2,000 lb.) (b)	Number of carloads (c)	Number of tons (2,000 lb.) (d)	Number of carloads (e)	Number of tons (2,000 lb.) (f)	Number of carloads (g)	Number of tons (2,000 lb.) (h)
	GROUP III. PRODUCTS OF MINES (C. L.)—Contd.								
	Brought forward	1,546	58 894	7,236	355 009	8,782	413 903	1,582	68 879
378	Asphalt (natural, byproduct, or petroleum)	-	-	148	5 226	148	5 226	45	1 646
380	Salt	-	-	159	4 294	159	4 294	37	1 075
382	Phosphate rock, crude (ground or not ground)	-	-	1	30	1	30	-	-
391	Sulphur (brimstone)	-	-	46	2 125	46	2 125	-	-
392	Products of mines, n. o. s.	365	17 714	1,932	86 243	2,297	103 957	56	3 021
393	TOTAL PRODUCTS OF MINES	1,911	76 608	9,522	452 927	11,433	529 535	1,720	74 621
	GROUP IV. PRODUCTS OF FORESTS (C. L.)								
400	Logs	3,505	103 278	-	-	3,505	103 278	3,505	103 278
401	Posts, poles, and piling	322	13 059	367	13 958	691	24 017	100	2 931
402	Wood (fuel)	501	21 526	-	-	501	21 526	3	150
410	Ties, railroad	49	1 921	233	7 707	282	9 628	15	350
420	Pulpwood	-	-	-	-	-	-	-	-
425	Lumber, shingles, and lath	681	18 294	4,427	119 960	5,108	138 254	135	3 071
431	Box, crate, and cooperage materials	29	730	283	6 672	312	7 402	1	39
432	Veneer and built-up wood	-	-	147	4 142	147	4 142	8	192
440	Resin	-	-	8	230	8	230	-	-
441	Turpentine	-	-	40	1 082	40	1 082	-	-
442	Crude rubber (not reclaimed)	-	-	161	4 886	161	4 886	-	-
443	Products of forests, n. o. s.	15	446	356	8 091	371	8 538	4	154
444	TOTAL PRODUCTS OF FORESTS	5,102	159 254	6,024	163 729	11,126	322 983	3,771	110 165
	GROUP V. MANUFACTURES AND MISCELLANEOUS (C. L.)								
450	Petroleum oils, refined, and all other gasoline	-	-	2,000	52 955	2,000	52 955	706	13 844
451	Fuel, road, and petroleum residual oils, n. o. s.	70	3 225	793	32 473	863	35 698	92	3 297
452	Lubricating oils and greases	-	-	862	19 505	862	19 505	35	605
453	Petroleum products, n. o. s.	-	-	17	443	17	443	-	-
460	Cottonseed oil	1	31	777	23 927	778	23 958	-	-
461	Linseed oil	-	-	26	749	26	749	-	-
462	Vegetable oil, n. o. s.	-	-	1,230	37 786	1,230	37 786	-	-
470	Sugar (beet or cane)	-	-	2,020	7 010	2,020	7 010	17	521
471	Table sirups and edible molasses	-	-	335	1 283	335	1 283	3	81
472	Molasses, blackstrap and beet residual	-	-	24	1 058	24	1 058	-	-
480	Iron, pig	-	-	2	105	2	105	-	-
481	Iron and steel, rated 8th class in official classification, n. o. s.	-	-	1	41	1	41	-	-
490	Rails, fastenings, frogs, and switches	8	310	237	11 311	245	11 621	81	3 644
491	Cast-iron pipe and fittings	-	-	121	4 099	121	4 099	3	42
492	Iron and steel pipe and fittings, n. o. s.	-	-	728	25 536	728	25 536	125	5 095
493	Iron and steel: Nails and wire, not woven	-	-	190	6 819	190	6 819	10	282
494	Iron and steel, rated 8th class in official classification, n. o. s. (also tin and terneplate)	-	-	2,961	122 706	2,961	122 706	25	672
495	Copper: Ingot, matte, and pig	-	-	1,975	109 963	1,975	109 963	-	-
496	Copper, brass, and bronze: Bar, sheet, and pipe	-	-	3,119	180 033	3,119	180 033	-	-

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SOUTHERN PACIFIC COMPANY - Pacific Lines  
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522	Lead and zinc: Ingot, pig, or bar	-	-	287	14 266	287	14 266	-	-
523	Aluminum: Ingot, pig, or slab	-	-	-	-	-	-	-	-
530	Machinery and boilers	3	44	1,016	22 161	1,019	22 205	22	555
531	Cement, natural or Portland (building)	-	-	1,186	52 281	1,186	52 281	127	4 815
532	Brick, common	18	615	7	226	25	841	7	228
533	Brick, n. o. s., and building tile	45	1 613	231	8 556	276	10 169	15	530
534	Artificial stone, n. o. s.	-	-	8	253	8	253	-	-
540	Lime, common (quick or slaked)	-	-	399	19 025	399	19 025	2	30
541	Plaster (sticking or wall) and for tile and pipe	-	-	146	6 125	146	6 125	-	-

STATE COMMISSION FOR RAILROADS

100	Cast-iron pipe and fittings	-	-	121	4 099	121	4 099	3	42
101	Iron and steel pipe and fittings, n. o. s.	-	-	728	25 536	728	25 536	125	5 095
102	Iron and steel: Nails and wire, not woven	-	-	190	6 819	190	6 819	10	282
103	Iron and steel, rolled flat plate in original classification, n. o. s. (see also 100-102)	-	-	2,961	122 706	2,961	122 706	25	672
104	Copper: Ingot, matte, and pig	-	-	1,975	109 963	1,975	109 963	-	-
105	Copper, brass, and bronze: Bar, sheet, and pipe	-	-	3,119	180 033	3,119	180 033	-	-

106	Lead and zinc: Ingot, pig, or bar	-	-	287	14 266	287	14 266	-	-
107	Aluminum: Ingot, pig, or slab	-	-	1,016	22 161	1,019	22 205	22	555
108	Machinery and boilers	3	44	1,186	52 281	1,186	52 281	127	4 815
109	Cement, natural or Portland (building)	18	615	7	226	25	841	7	228
110	Brick, common	45	1 613	231	8 556	276	10 169	15	530
111	Brick, n. o. s., and building tile	-	-	8	253	8	253	-	-
112	Artificial stone, n. o. s.	-	-	399	19 025	399	19 025	2	30
113	Lime, common (quick or slaked)	-	-	146	4 425	146	4 425	27	637
114	Plaster (stucco or wall) and dry kalsomine	-	-	37	650	37	650	18	267
115	Sewer pipe and drain tile (not metal)	-	-	243	4 585	243	4 585	-	-
116	Agricultural implements and parts, n. o. s.	-	-	10	118	10	118	-	-
117	Vehicles, horse-drawn, and parts, n. o. s.	-	-	439	9 803	439	9 803	4	66
118	Tractors and parts	-	-	10	221	11	229	1	8
119	Railway car wheels, axles, and trucks	1	8	1,731	10 646	1,731	10 646	78	458
120	Automobile (passenger)	-	-	365	2 966	365	2 966	29	179
121	Autotrucks	-	-	3,142	61 275	3,142	61 275	-	-
122	Automobiles and autotrucks, K. D. and parts, n. o. s.	-	-	704	15 304	704	15 304	-	-
123	Automobile and autotruck tires	-	-	125	1 574	125	1 574	-	-
124	Furniture, metal	-	-	1,123	10 376	1,123	10 376	-	-
125	Furniture, other than metal	-	-	2,462	65 225	2,462	65 225	5	110
126	Beverages	1	20	2	36	3	56	2	36
127	Ice	1	40	1,420	71 398	1,421	71 398	1	40
128	Fertilizers, n. o. s.	-	-	54	1 456	54	1 456	-	-
129	Newspaper paper	-	-	239	5 901	239	5 901	-	-
130	Printing paper, n. o. s.	-	-	20	641	20	641	-	-
131	Alcohol, denatured or wood	-	-	61	2 273	61	2 273	-	-
132	Sulphuric acid	-	-	136	3 557	136	3 557	9	142
133	Explosives, n. o. s.	-	-	369	6 859	369	6 859	-	-
134	Cotton cloth and cotton fabrics, n. o. s.	-	-	51	1 138	51	1 138	-	-
135	Bagging and bags, burlap, gunny, or jute	-	-	3,293	103 138	3,293	103 138	10	253
136	Canned food products, n. o. s.	-	-	958	20 267	958	20 267	1	35
137	Tobacco, manufactured products	-	-	86	2 478	86	2 478	7	284
138	Paints in oil and varnishes	-	-	1	50	1	50	-	-
139	Furnace slag	38	1 206	306	14 384	344	15 590	-	-
140	Scrap iron and scrap steel	-	-	345	8 227	345	8 227	3	71
141	Paper bags and wrapping paper	-	-	375	9 586	375	9 586	14	323
142	Paperboard, pulpboard, and wallboard (paper)	-	-	112	3 004	112	3 004	12	276
143	Building paper and prepared roofing materials	-	-	377	7 998	377	7 998	5	97
144	Building woodwork (millwork)	-	-	148	3 283	148	3 283	9	159
145	Soap and washing compounds	-	-	311	11 389	311	11 389	-	-
146	Glass, flat, other than plate	3	47	683	11 402	686	11 449	4	83
147	Glass: Bottles, jars, and jelly glasses	72	1 429	18 049	379 845	18 121	381 274	189	17 022
148	Manufactures and miscellaneous, n. o. s.	261	8 588	58 745	1 689 008	58 746	1 697 596	1 698	60 212
149	TOTAL MANUFACTURES AND MISCELLANEOUS	9,991	274 767	180,837	3 925 847	190,828	4 200 614	7,801	254 844
150	GROUP V L. C. L. FREIGHT	-	-	-	-	-	-	-	-
151	All L. C. L. freight	-	434	-	58 781	-	59 215	-	4 409
152	GRAND TOTAL, CARLOAD AND L. C. L. TRAFFIC	-	275 201	-	3 984 628	-	4 259 829	-	259 253
153	Forwarder traffic included in Class 701**	-	-	2,437	29 922	2,437	29 922	-	-

\*Not required from switching and terminal companies.

\*\*Traffic data may be given in a footnote without subdivisions by commodities, but if possible by direction of movement.

\*\*\*Not required for Class 11 roads.



# 341. REVENUE FREIGHT CARRIED DURING THE YEAR—WITHIN THE STATE\*

Give the particulars called for concerning the commodities carried on the respondent's road during the year, the revenue from which is includible in account No. 101, "Freight", classifying them in accordance with the Interstate Commerce Commission's Order in the Matter of Freight Commodity Statistics, effective January 1, 1928, as amended by order of December 14, 1928.

In stating the number of tons received from connecting carriers, include all shipments that, so far as apparent from the information on the waybills or abstracts of waybills, have been received from connecting rail carriers either directly or indirectly. Shipments from boat lines should also be included when identified as having had pre-

vious rail transportation by United States rail carriers or as moving on joint through bills of lading by connecting water carriers and railways.

Tonnage originating on switching roads connecting directly or indirectly with respondent's line should be regarded as tonnage originated by respondent. Import traffic and traffic from outlying possessions of the United States received from water carriers should be regarded as originating at the port of entry. All other tonnage should be treated as originating on line, including finished products from transit points.

If the application of these instructions results in any marked deviation from the

respondent's past practice, that fact should be stated in a footnote in order that proper allowance can be made in interpreting the statistics.

Particulars for Classes Nos. 10 to 701 should include carload traffic only, all less than carload traffic being included in Class No. 710.

Information as to carloads and tons of forwarder traffic included in Class 701 should be reported against commodity class designated 701-A. To avoid undue clerical labor, Class 701-A may be restricted to the principal forwarding companies or their subsidiaries originating in the aggregate not less than approximately 80 percent of such traffic handled on respondent's line. The term "Forwarder traffic" is defined in the third paragraph of instructions for schedule No. 341 on page No. 312.

Class No	Commodity (a)	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD WITHIN THE STATE			ALL OTHER REVENUE FREIGHT CARRIED WITHIN THE STATE			TOTAL REVENUE FREIGHT CARRIED WITHIN THE STATE			TOTAL REVENUE FREIGHT TERMINATING ON RESPONDENT'S ROAD WITHIN THE STATE		
		Number of carloads (b)	Number of tons (2,000 lb.) (c)		Number of carloads (d)	Number of tons (2,000 lb.) (e)		Number of carloads (f)	Number of tons (2,000 lb.) (g)		Number of carloads (h)	Number of tons (2,000 lb.) (i)	
GROUP 1. PRODUCTS OF AGRICULTURE (C. I.)													
10	Wheat	30	1	071	971	49	323	1 001	50	394	24		863
20	Corn	-	-	-	3,023	127	890	3,023	127	890	8		320
30	Oats	-	-	-	89	3	037	89	3	037	4		121
40	Barley and rye	12	-	396	105	4	591	117	4	987	15		482
41	Rice	-	-	-	71	3	298	71	3	298	-		-
42	Grain, n. o. s.	-	-	-	15		468	15		468	-		-
50	Flour, wheat	2	-	25	687	18	452	689	18	477	89		2 411
51	Meal, corn	-	-	-	22		689	22		689	2		60
52	Flour and meal, edible, n. o. s.	-	-	-	70	2	090	70	2	090	-		-
60	Cereal food preparations, edible, n. o. s.	-	-	-	427	8	286	427	8	286	1		5
61	Mill products, n. o. s.	111	2	940	554	15	947	665	18	887	66		1 765
70	Hay and alfalfa	45	-	814	24		381	69	1	195	15		318
71	Straw	-	-	-	-	-	-	-	-	-	-		-
80	Tobacco, leaf	-	-	-	21		463	21		463	-		-
90	Cotton in bales	-	-	-	62	1	701	62	1	701	-		-
91	Cotton linters, nolls, and regins	-	-	-	4		92	4		92	-		-
100	Cottonseed	1	-	36	-	-	-	1		36	-		-
101	Cottonseed meal and cake	-	-	-	76	1	946	76	1	946	31		831
110	Oranges and grapefruit	-	-	-	4,901	88	461	4,901	88	461	20		238
111	Lemons, limes, and citrus fruits, n. o. s.	-	-	-	290	4	954	290	4	954	-		-
120	Apples, fresh	-	-	-	367	6	894	367	6	894	12		203
121	Bananas	-	-	-	144	1	511	144	1	511	48		497
122	Berries, fresh	-	-	-	8		143	8		143	-		-
123	Cantaloupes and melons, n. o. s.	-	-	-	2,000	22	171	2,000	22	171	4		45
124	Grapes, fresh	-	-	-	12,876	219	146	12,876	219	146	3		45
125	Peaches, fresh	-	-	-	1,573	29	560	1,573	29	560	3		36
126	Watermelons	-	-	-	210	2	629	210	2	629	4		51
127	Fruits, fresh, domestic, n. o. s.	-	-	-	8,531	142	104	8,531	142	104	-		-
128	Fruits, fresh, tropical, n. o. s.	-	-	-	136	2	151	136	2	151	-		-
130	Potatoes, other than sweet	29	-	527	2,407	37	246	2,436	37	773	8		135
140	Cabbage	-	-	-	22		305	22		305	-		-
141	Cincons	29	-	439	224	3	395	253	3	834	2		30
142	Tomatoes	-	-	-	1,316	14	258	1,316	14	258	2		25
143	Vegetables, fresh, n. o. s.	-	-	-	35,865	425	105	35,865	425	105	4		42

Report for the Year ended December 31, 1939

Defendant's Exhibit No. 219 (Wit.  
Jan. 29, 1941

STATE OF NEVADA

SOUTHERN PACIFIC COMPANY - Pacific

129	Beans and peas, dried	1	12	976	30 141	977	30 153	2	60
131	Fruits, dried or evaporated	-	-	1,710	56 221	1,710	56 221	1	32
132	Vegetables, dry, n. o. s.	-	-	62	958	62	958	1	15
133	Vegetables, dried and meal	-	-	-	-	-	-	-	-

It's Exhibit No. 219 (Witness Masson)  
Jan. 29, 1941

THE PACIFIC COMPANY - Pacific Lines  
STATE OF NEVADA

126	Vegetables, fresh, n. o. s.	-	-	8,521	14	105	8,521	14	105	-	-
127	Fruits, fresh, domestic, n. o. s.	-	-	136	2	151	136	2	151	-	-
128	Fruits, fresh, tropical, n. o. s.	-	-	2,407	37	246	2,436	37	273	8	135
129	Potatoes, other than sweet	29	-	22	-	305	22	-	305	-	-
130	Cabbage	-	439	224	3	395	253	3	834	2	30
131	Onions	29	-	1,316	14	258	1,316	14	258	2	25
132	Tomatoes	-	-	35,865	425	105	35,865	425	105	4	42
133	Vegetables, fresh, n. o. s.	-	-	-	-	-	-	-	-	-	-

134	Beans and peas, dried	1	12	976	30	141	977	30	153	2	60
135	Fruits, dried or evaporated	-	-	1,710	56	221	1,710	56	221	1	32
136	Vegetables, dry, n. o. s.	-	-	62	-	958	62	-	958	1	15
137	Vegetable-oil cake and meal, except cottonseed	-	-	32	1	341	32	1	341	-	-
138	Peanuts	-	-	19	-	383	19	-	383	-	-
139	Flaxseed	-	-	2	-	67	2	-	67	-	-
140	Sugar beets	487	18	071	1	23	488	18	094	-	-
141	Products of agriculture, n. o. s.	3	-	106	47	979	1,962	48	085	43	910
142	TOTAL PRODUCTS OF AGRICULTURE	750	24	437	1	369	800	1	394	237	9 640
GROUP H. ANIMALS AND PRODUCTS (C. L.)											
143	Horses, mules, ponies, and asses	33	391	41	-	478	74	-	869	5	53
144	Cattle and calves, single-deck	2,125	26	359	29	198	4,426	55	557	695	8 391
145	Calves, double-deck	11	-	23	-	327	34	-	476	7	98
146	Sheep and goats, single-deck	25	-	66	-	428	91	-	605	21	142
147	Sheep and goats, double-deck	503	5	808	25	995	3,005	31	803	185	2 526
148	Hogs, single-deck	4	-	38	-	361	42	-	397	2	17
149	Hogs, double-deck	-	-	676	9	397	676	9	397	15	201
150	Fresh meats, n. o. s.	-	-	29	-	430	29	-	430	-	-
151	Meats, cured, dried, or smoked	-	-	992	19	008	992	19	008	28	487
152	Butterine and margarine	-	-	17	-	229	17	-	229	-	-
153	Packing house products, edible, n. o. s., not including cured meats	-	-	78	1	343	78	1	343	3	46
154	Poultry, live	-	-	56	-	454	56	-	454	-	-
155	Poultry, dressed	-	-	362	5	828	362	5	828	-	-
156	Eggs	-	-	285	4	476	285	4	476	-	-
157	Butter	-	-	231	3	433	231	3	433	4	57
158	Cheese	-	-	82	1	422	82	1	422	-	-
159	Wool	67	-	918	3	847	314	4	765	-	-
160	Hides, green	1	-	15	1	784	55	1	799	-	-
161	Leather	-	-	48	-	613	48	-	613	-	-
162	Fish or sea-animal oil	-	-	404	11	939	404	11	939	-	-
163	Animals, live, n. o. s.	-	-	1	-	15	1	-	15	-	-
164	Animal products, n. o. s. (other than fertilizer and fertilizer materials)	16	-	406	31	973	1,206	32	379	4	113
165	TOTAL ANIMALS AND PRODUCTS	2,785	34	259	152	978	12,508	187	237	969	12 071
GROUP III. PRODUCTS OF MINES (C. L.)											
166	Anthracite coal	-	-	1	-	26	1	-	26	-	-
167	Bituminous coal	14	-	637	141	424	3,379	142	061	619	23 586
168	Coke	3	-	126	15	669	446	15	795	3	85
169	Iron ore	-	-	2	-	121	2	-	121	-	-
170	Copper ore and concentrates	87	5	147	-	269	92	5	416	-	-
171	Lead ore and concentrates	-	-	1	-	50	1	-	50	-	-
172	Zinc ore and concentrates	-	-	1	-	406	9	-	406	-	-
173	Ores and concentrates, n. o. s.	452	21	762	28	572	1,047	50	336	2	55
174	Gravel and sand (other than glass or molting)	3	-	129	-	303	11	-	432	4	137
175	Stone, broken, ground, or crushed	39	-	1,912	1	145	63	3	057	9	318
176	Stone, rough, n. o. s.	-	-	16	-	737	16	-	737	-	-
177	Stone, finished, n. o. s.	-	-	16	-	628	16	-	628	1	45
178	Petroleum, crude	-	-	1	-	31	1	-	31	-	-
179	Carried forward	598	29	713	189	383	5,084	219	096	638	24 226

\* Not required from shipping and terminal companies. † Trans-State traffic may be given in a separate without subdivision by commodities, but if possible by direction of movement.



341. REVENUE FREIGHT CARRIED DURING THE YEAR—WITHIN THE STATE—Concluded

Class No.	Commodity	REVENUE FREIGHT ORIGINATING ON RESPONDENT'S ROAD WITHIN THE STATE		ALL OTHER REVENUE FREIGHT CARRIED WITHIN THE STATE		TOTAL REVENUE FREIGHT CARRIED WITHIN THE STATE		TOTAL REVENUE FREIGHT TERMINATING ON RESPONDENT'S ROAD WITHIN THE STATE	
		Number of carloads (b)	Number of tons (2,000 lb.) (c)	Number of carloads (d)	Number of tons (2,000 lb.) (e)	Number of carloads (f)	Number of tons (2,000 lb.) (g)	Number of carloads (h)	Number of tons (2,000 lb.) (i)
	GROUP III. PRODUCTS OF MINES (C. L.)—Contd.								
	Brought forward	598	29 713	4,486	189 383	5,084	219 096	638	24 226
370	Asphalt (natural, byproduct, or petroleum)	1	12	913	33 272	914	33 284	231	7 996
380	Salt	1	24	109	3 550	110	3 574	47	1 880
390	Phosphate rock, crude (ground or not ground)	-	-	116	5 579	116	5 579	-	-
400	Sulphur (brimstone)	-	-	8	142	8	142	1	5
410	Products of mines, n. o. s.	518	28 628	749	34 802	1,267	63 430	8	330
420	TOTAL PRODUCTS OF MINES	1,118	58 377	6,381	266 728	7,499	325 105	925	34 437
	GROUP IV. PRODUCTS OF FORESTS (C. L.)								
430	Logs	-	-	8	285	8	285	1	46
440	Posts, poles, and piling	-	-	1,568	43 733	1,568	43 733	53	1 421
450	Wood (fuel)	5	80	423	9 144	428	9 224	401	8 585
460	Ties, railroad	-	-	243	9 919	243	9 919	10	301
470	Pulpwood	-	-	-	-	-	-	-	-
480	Lumber, shingles, and lath	125	3 315	33,566	973 751	33,691	977 066	577	15 715
490	Box, crate, and cooperage materials	16	533	2,789	66 652	2,805	67 185	-	-
500	Veneer and built-up wood	-	-	713	19 293	713	19 293	6	124
510	Resin	-	-	-	-	-	-	-	-
520	Turpentine	-	-	-	-	-	-	-	-
530	Crude rubber (not reclaimed)	-	-	12	439	12	439	-	-
540	Products of forests, n. o. s.	1	15	262	5 733	263	5 748	5	89
550	TOTAL PRODUCTS OF FORESTS	147	3 943	39,584	1 128 949	39,731	1 132 892	1,053	26 281
	GROUP V. MANUFACTURES AND MISCELLANEOUS (C. L.)								
560	Petroleum oils, refined, and all other gasoline	-	-	3,771	114 906	3,771	114 906	2,227	71 437
570	Fuel, road, and petroleum residual oils, p. o. s.	1	39	7,243	326 471	7,244	326 510	6,414	298 006
580	Lubricating oils and greases	-	-	429	8 293	429	8 293	57	695
590	Petroleum products, n. o. s.	-	-	70	1 521	70	1 521	-	-
600	Cottonseed oil	-	-	126	3 870	126	3 870	1	16
610	Linseed oil	-	-	13	376	13	376	-	-
620	Vegetable oil, n. o. s.	-	-	699	21 295	699	21 295	-	-
630	Sugar (beet or cane)	-	-	2,294	86 600	2,294	86 600	7	281
640	Table sirups and edible molasses	-	-	217	7 583	217	7 583	-	-
650	Molasses, blackstrap and beet residual	-	-	87	4 038	87	4 038	-	-
660	Iron, pig	-	-	837	48 304	837	48 304	-	-
670	Iron and steel, rolled 6th class in official classification, n. o. s.	-	-	3	74	3	74	-	-
680	Rails, fastenings, frogs, and switches	1	68	108	5 072	109	5 140	49	2 077
690	Cast-iron pipe and fittings	-	-	115	4 091	115	4 091	4	123
700	Iron and steel pipe and fittings, n. o. s.	1	5	359	11 338	360	11 343	28	517
710	Iron and steel: Nails and wire, not woven	-	-	95	3 482	95	3 482	5	150
720	Iron and steel, rolled 6th class in official classification, 7. o. s. (also tin and terplate)	1	15	2,031	81 112	2,032	81 127	80	1 593
730	Copper: Ingot, matte, and pig	-	-	578	30 929	578	30 929	-	-
740	Copper, brass, and bronze: Bar, sheet, and pipe	-	-	7	230	7	230	-	-

Report for the year ended December 31, 1939

SOUTHERN PACIFIC COMPANY—Pacific 1  
STATE OF NEVADA

750	Lead and zinc: Ingot, pig, or bar	-	-	86	4 461	86	4 461	2	10
760	Aluminum: Ingot, pig, or slab	-	-	1	20	1	20	-	-
770	Machinery and boilers	11	340	713	14 687	724	15 027	43	872
780	Cement, natural or Portland (building)	-	-	554	16 790	554	16 790	390	11 329
790	Brick, common	-	-	1	34	1	34	-	-

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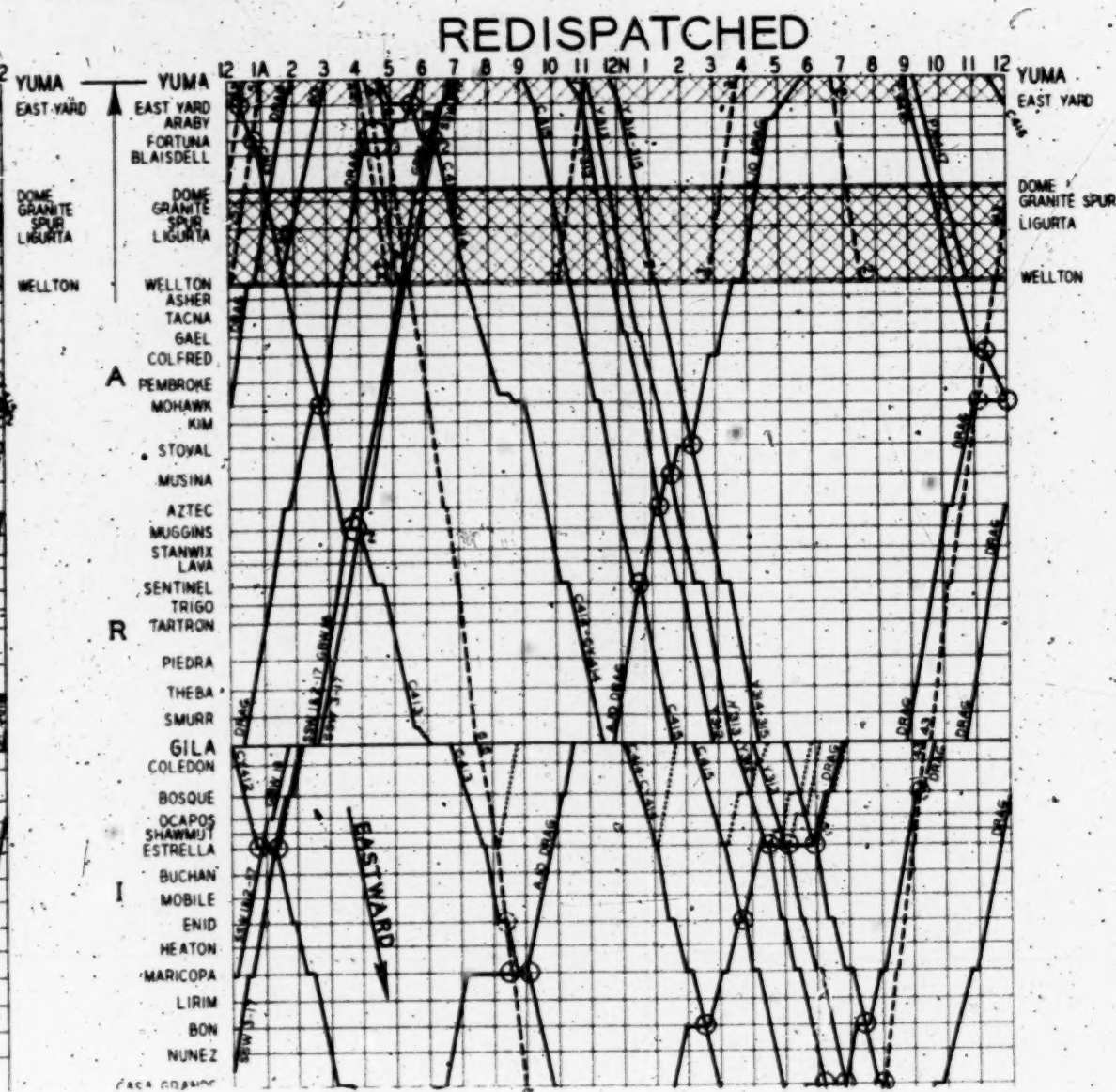
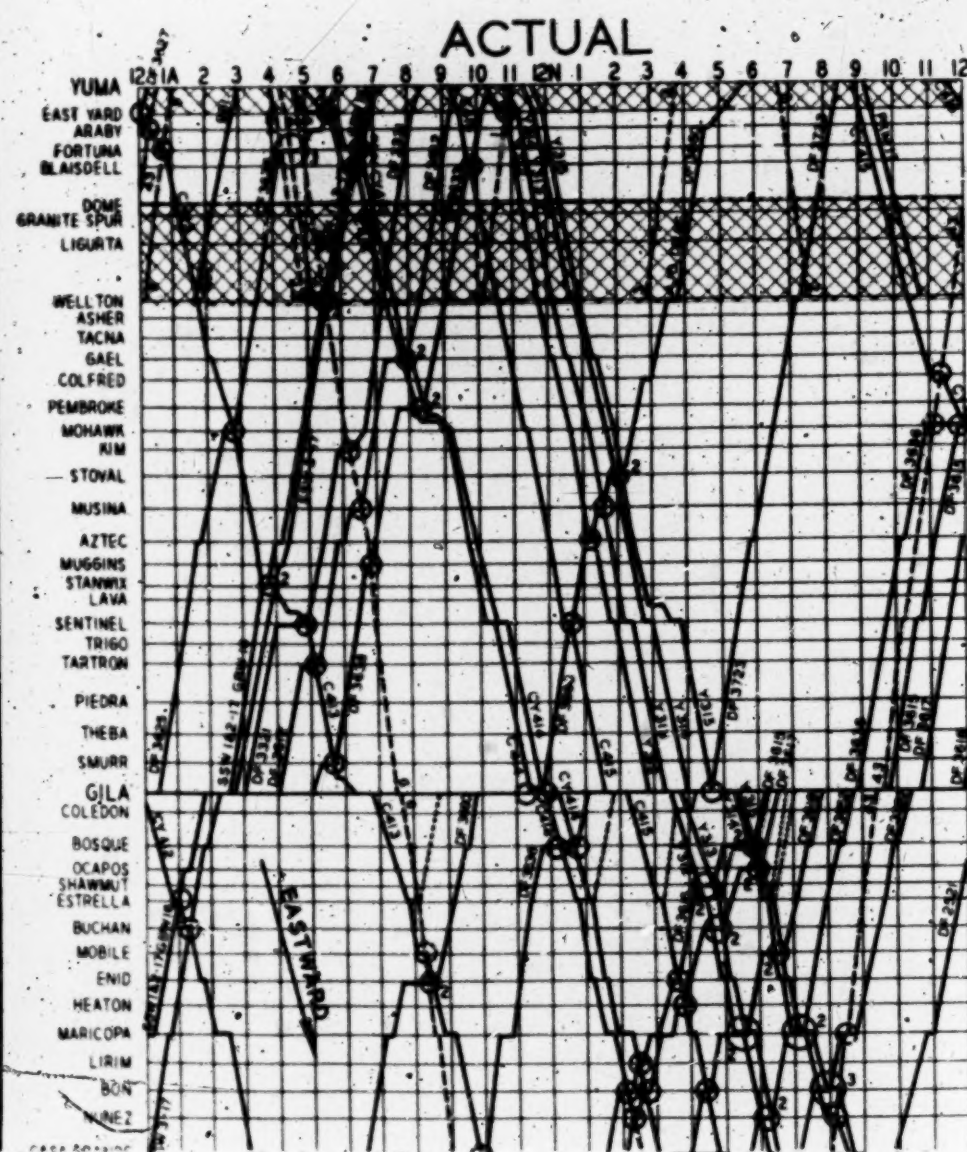
<sup>1</sup> Trans-State traffic may be given in a forward without subdivision by commodities, but if possible by direction of movement.

<sup>a</sup>Not required for Class II roads.

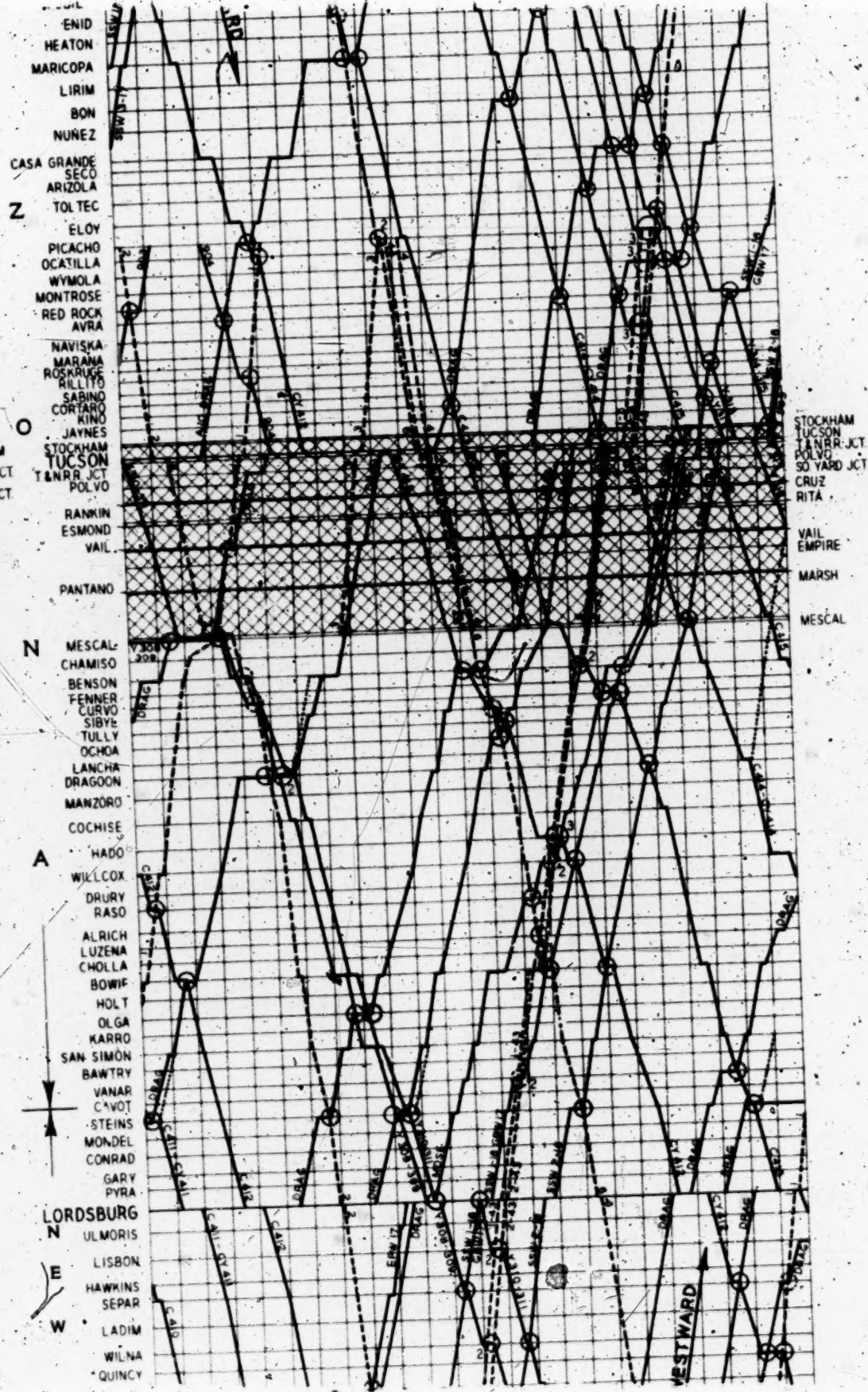
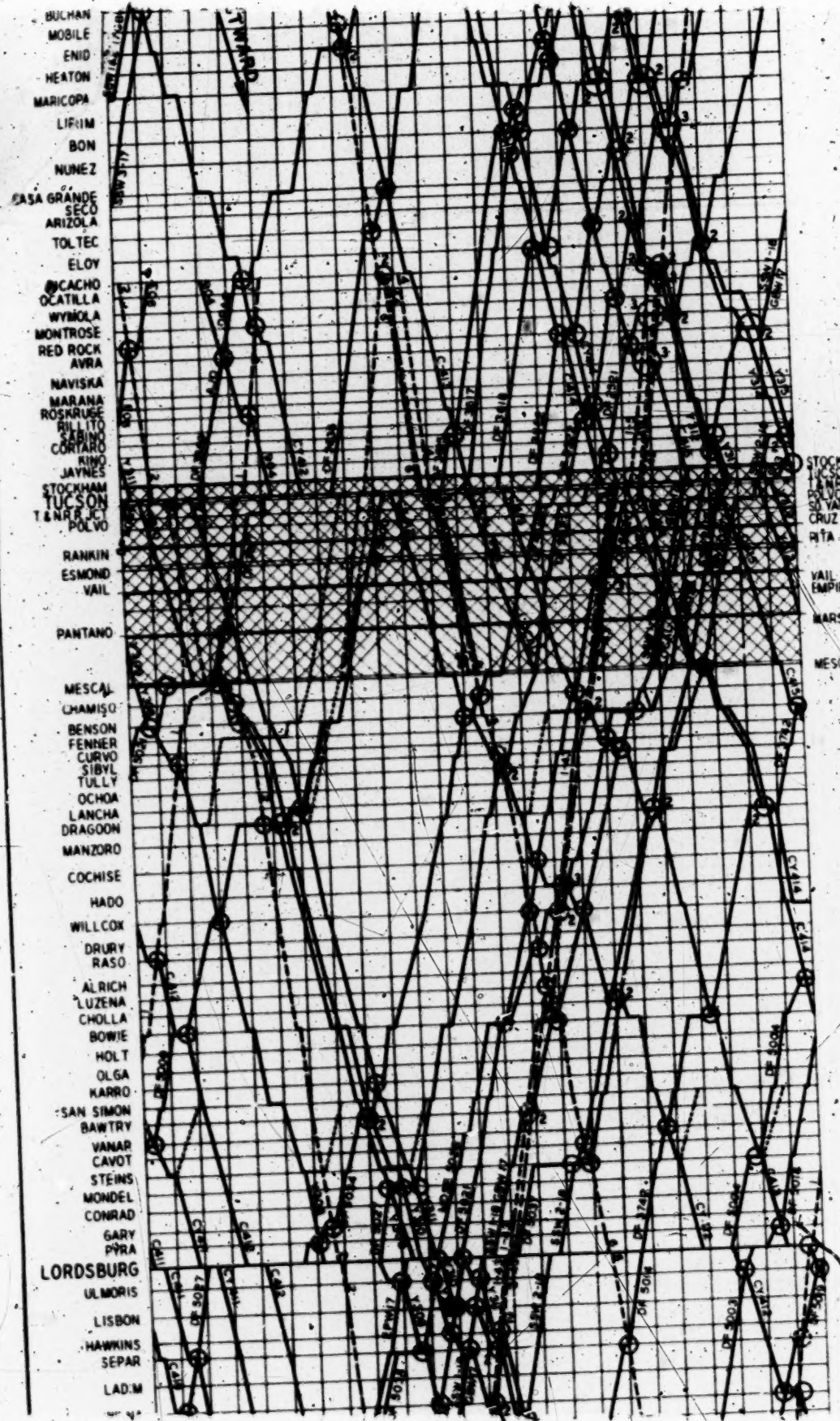


Defendant's Exhibit No. 220 (Witness Sines)  
Jan. 29, 1941

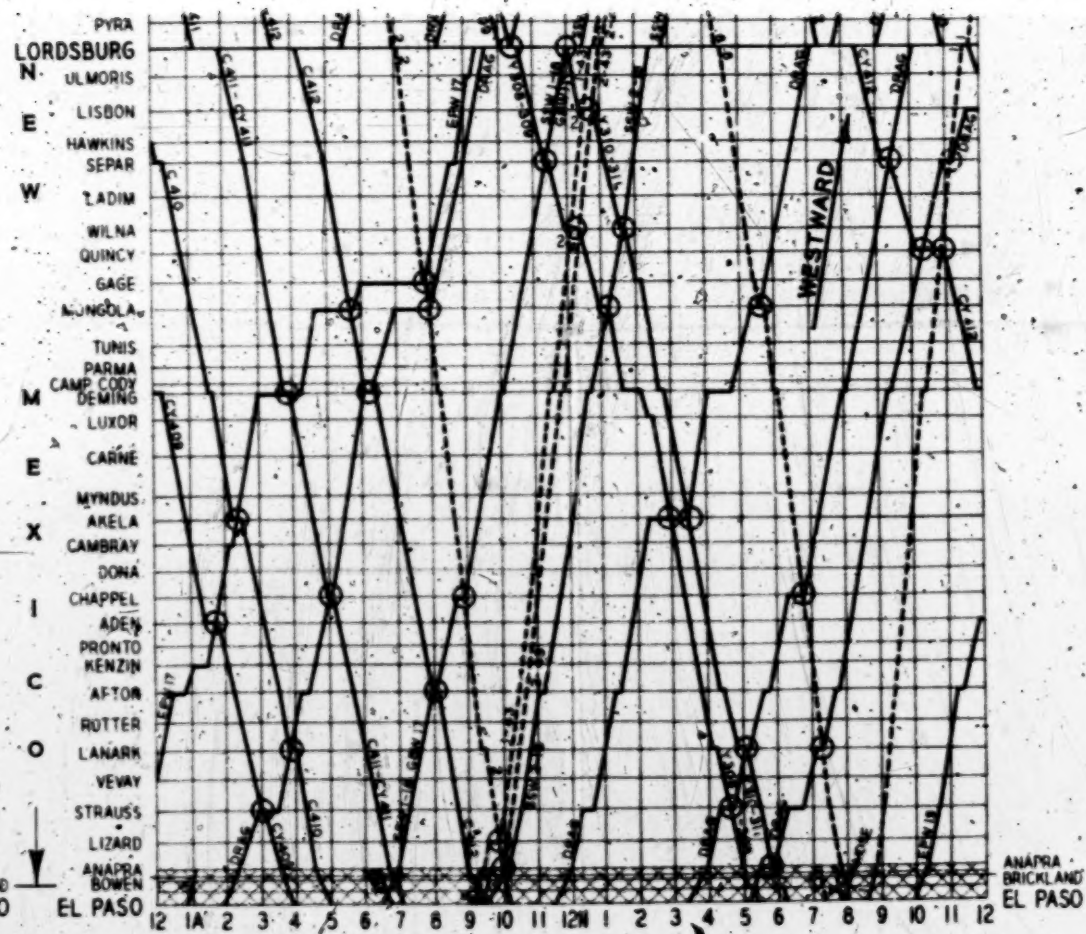
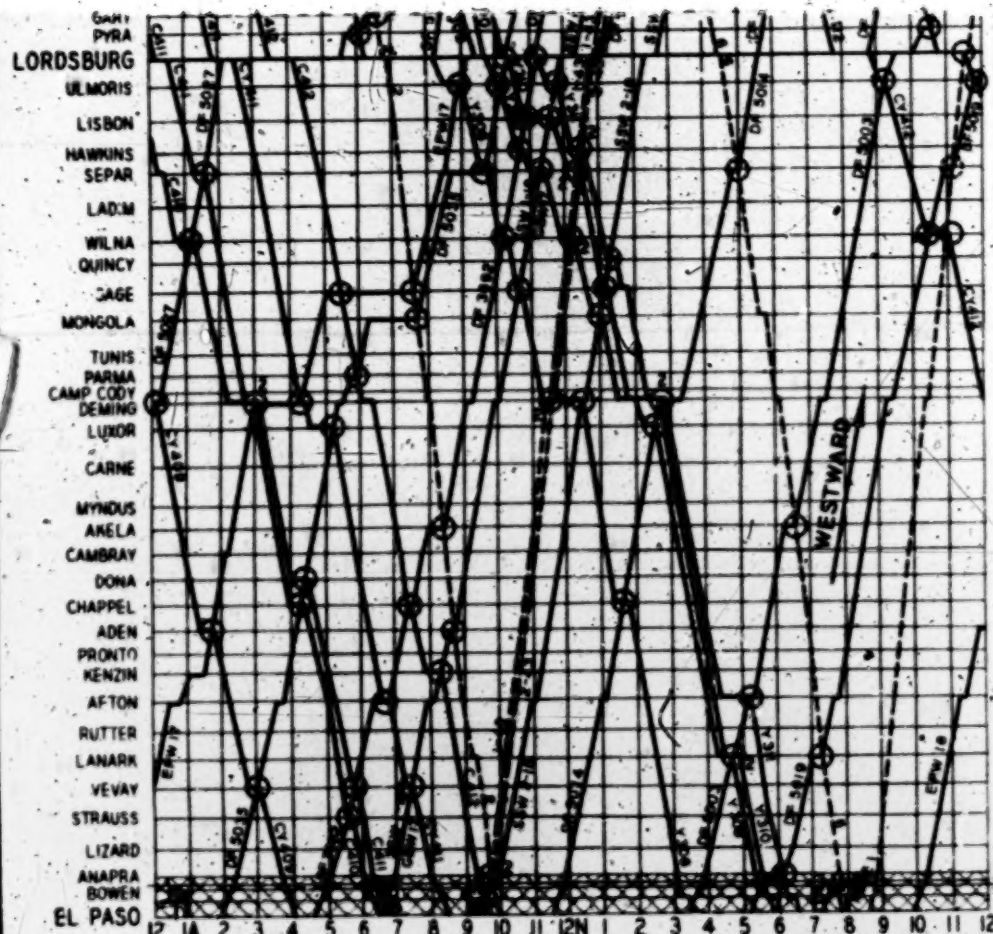
SOUTHERN PACIFIC COMPANY  
YUMA, ARIZONA TO EL PASO, TEXAS.  
JUNE 18, 1938  
TRAIN MOVEMENTS











STATIONS ON RIGHT OF CHARTS ARE STATIONS ON WESTWARD TRACK.

- XXXX INDICATES DOUBLE TRACK.  
 ——— FREIGHT TRAINS.  
 - - - - - PASSENGER TRAINS.  
 - - - - - HELPERS AND LIGHT ENGINES.  
 ○ MEET NUMERALS PLACED ALONG SIDE OF CIRCLE INDICATES NUMBER OF MEETS OR PASSES.  
 ○ PASS  
 ★ DOES NOT INCLUDE MEETS OR PASSES WITH LIGHT HELPER MOVEMENTS.

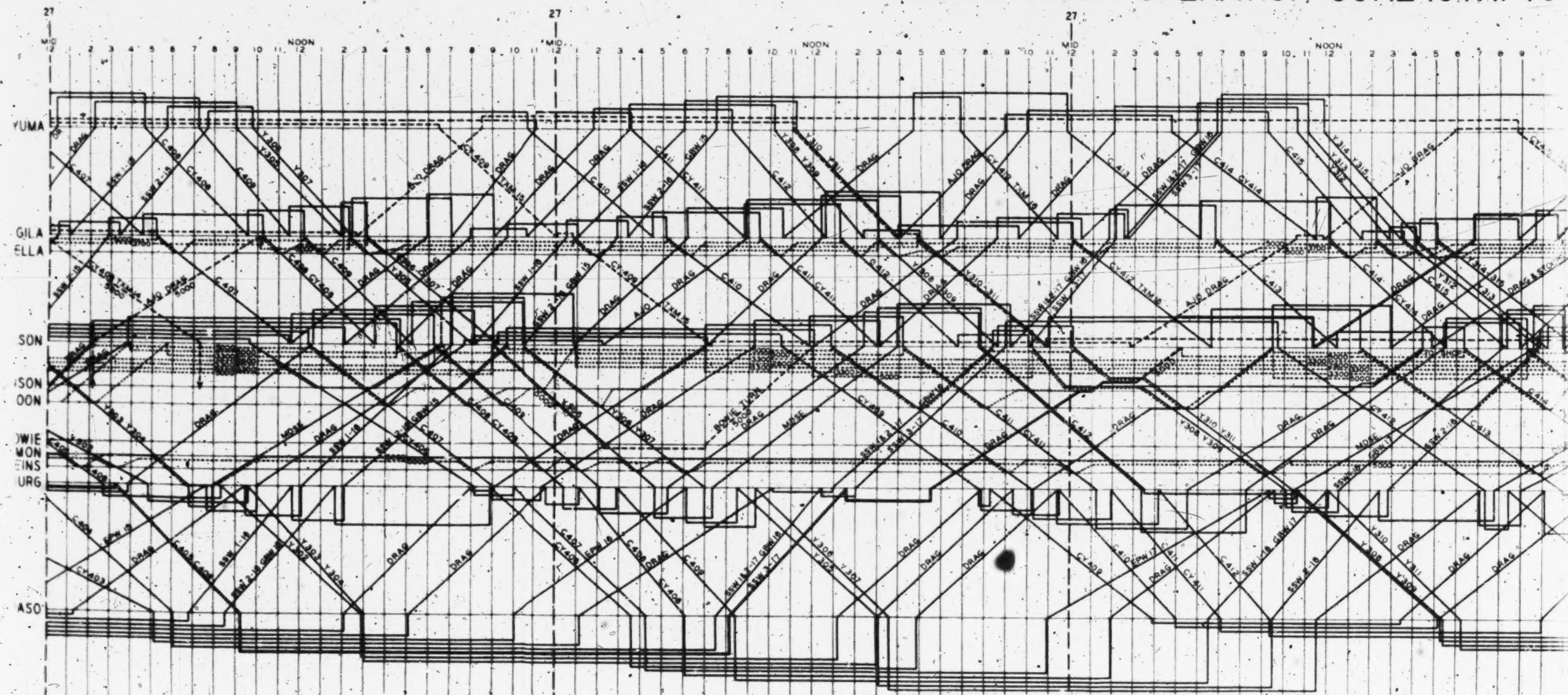
ACTUAL

REDISPATCHED

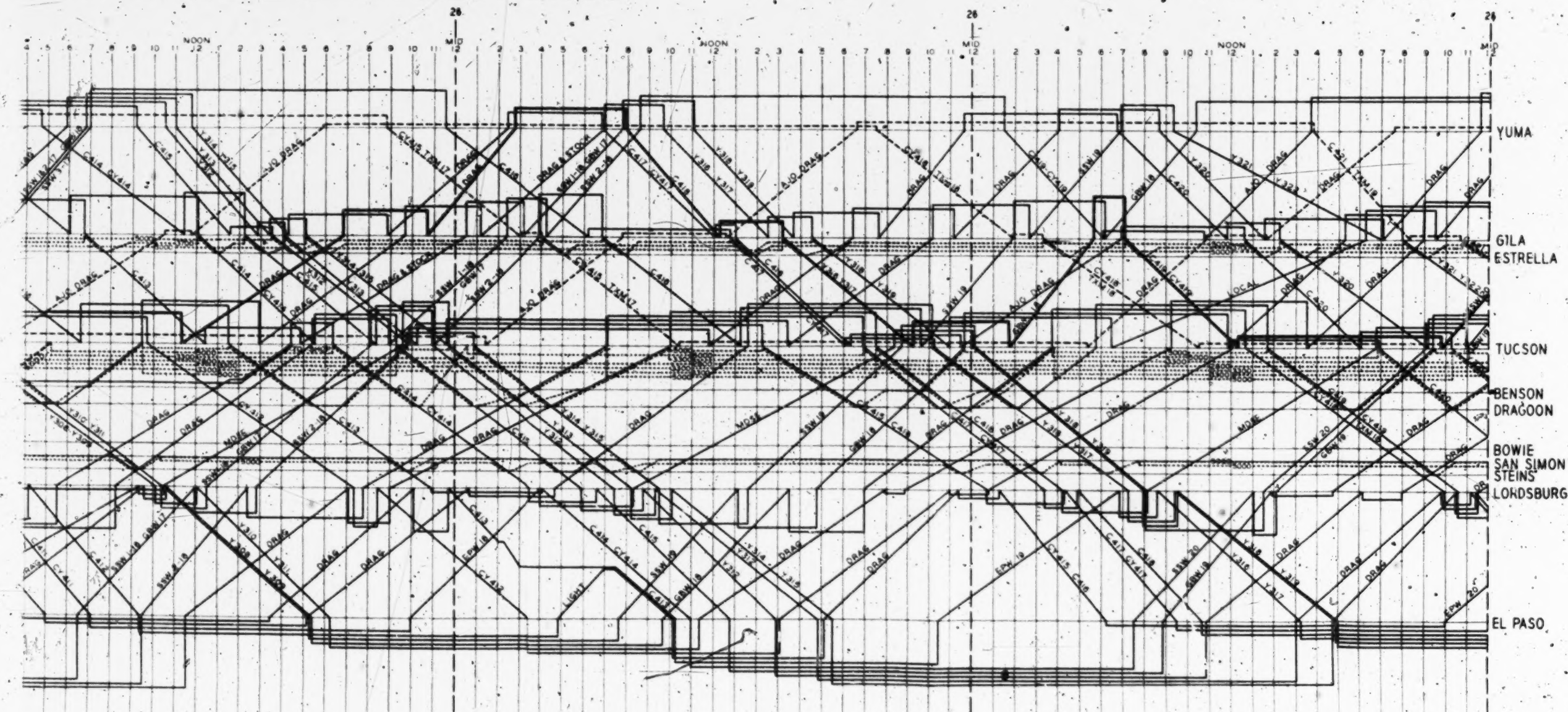
41	NUMBER OF TRAINS EASTWARD	32
48	NUMBER OF TRAINS WESTWARD	34
0	NUMBER OF LIGHT ENGINE MOVEMENTS	0
1	NUMBER OF LIGHT HELPER MOVEMENTS EASTWARD	0
15	NUMBER OF LIGHT HELPER MOVEMENTS WESTWARD	12
232	NUMBER OF MEETS	123
22	NUMBER OF PASSES	15
254	TOTAL NUMBER OF MEETS AND PASSES	138



YUMA, ARIZONA - EL PASO, TEXAS VIA GILA  
LOCOMOTIVE REQUIREMEN  
FOR  
LONG TRAIN OPERATION JUNE 16TH. TO

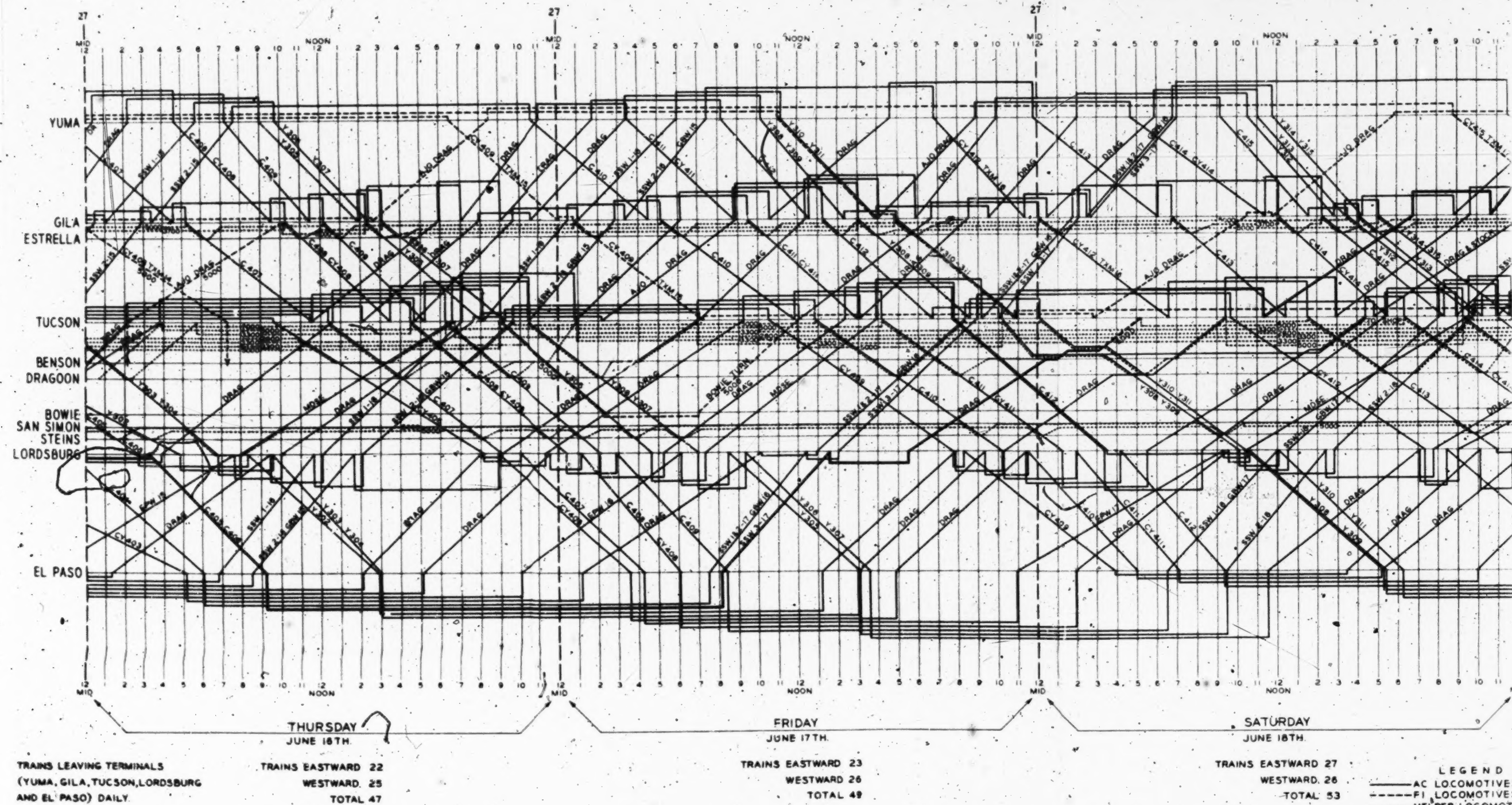


PASO, TEXAS VIA GILA AND LORDSBURG.  
MOTIVE REQUIREMENTS  
FOR  
OPERATION JUNE 16TH TO 20TH, 1938

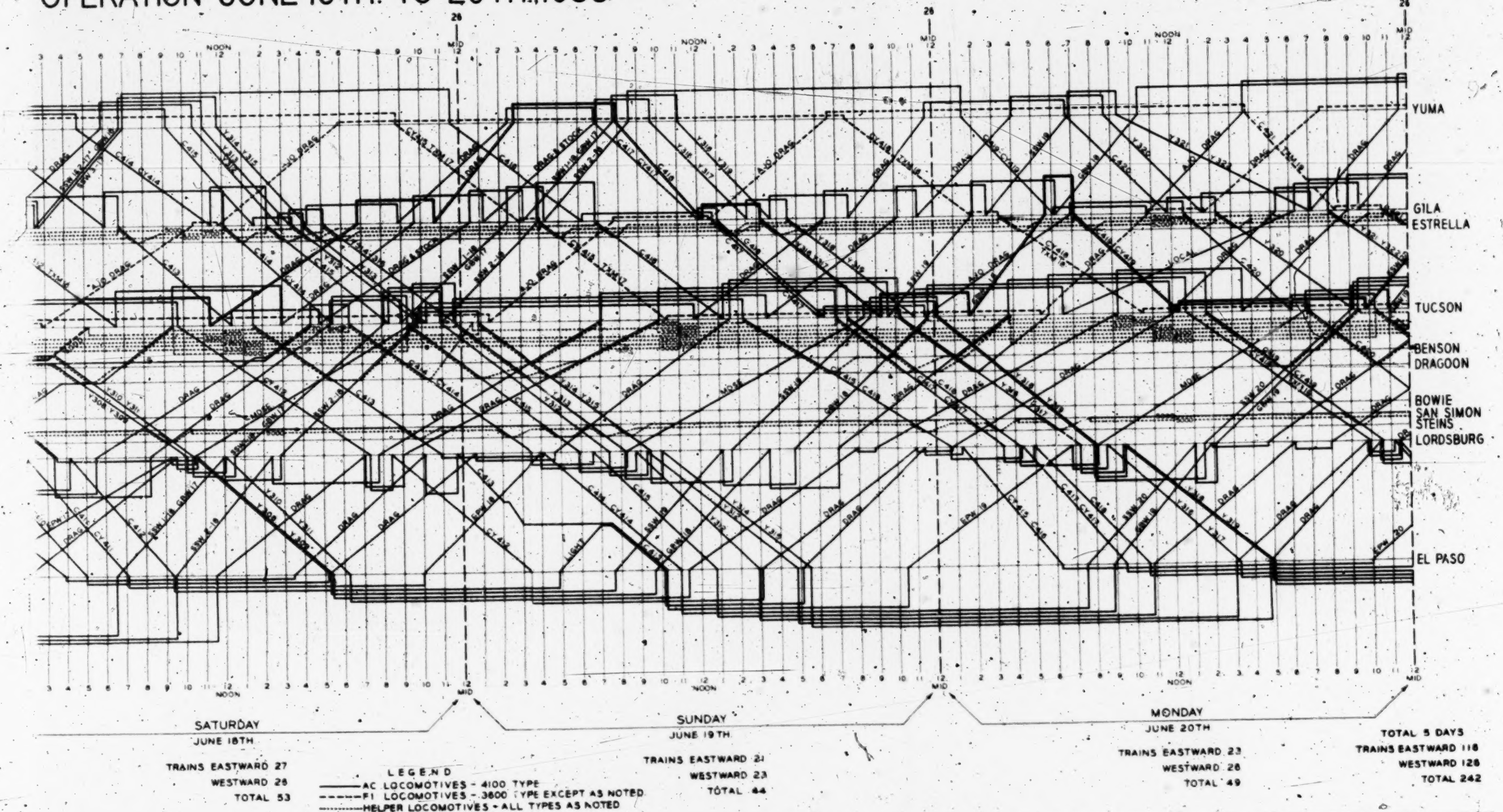




# YUMA, ARIZONA - EL PASO, TEXAS VIA GILA A LOCOMOTIVE REQUIREMENTS FOR LONG TRAIN OPERATION JUNE 16TH. TO



# EL PASO, TEXAS VIA GILA AND LORDSBURG. LOCOMOTIVE REQUIREMENTS FOR OPERATION JUNE 16TH. TO 20TH. 1938





Defendant's Exhibit No. 223 (Witness Sines)  
Jan. 29, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

LOCOMOTIVE ASSIGNMENT, WEIGHT AND INVESTMENT  
YUMA, ARIZONA TO EL PASO, TEXAS  
(INCLUDING THE DOUGLAS LINE AND EXCLUDING THE PHOENIX LINE)  
JUNE - 1938

DISTRICT		ASSIGNMENT		ACTUAL	REDISPATCHED
	(a)	TYPE		(c)	(d)
			(b)		
(1)	Yuma - Tucson via Gila	MK-2, 4	2-8-2	3	-
		MK-7, 8, 9	2-8-2	3	-
		C-9, 10	2-8-0	3	-
		P-1	2-10-2	20	3
		P-3, 4, 5	2-10-2	7	-
(2)	Gila - Estrella Helper	MK-7, 8, 9	2-8-2	5	-
		P-3, 4, 5	2-10-2	-	1
		SP-1, 2, 3	4-10-2	-	2
(3)	Tucson - El Paso via Lordsburg	SP-1, 2, 3	4-10-2	25	-
(4)	Tucson - Dragon Helper	MK-7, 8, 9	2-8-2	Included in Yuma-Tucson and Tucson-El Paso Districts	3
		P-3, 4, 5	2-10-2		2
		SP-1, 2, 3	4-10-2		4
		C-9, 10	2-8-0		1
(5)	San Simon Helper	MK-7, 8, 9	2-8-2	3	-
		SP-1, 2, 3	4-10-2	-	2
(6)	Yuma - El Paso via Gila and Lordsburg	AC-8	4-8-8-2	-	30
(7)	Tucson - El Paso, South Line	SP-1, 2, 3	4-10-2	3	3
		MK-7, 8, 9	2-8-2	2	2
(8)	TOTAL			74	55

RECAPITULATION OF ASSIGNMENTS, AND COMPUTATION OF TOTAL WEIGHT AND INVESTMENT						
	TYPE (e)	AVERAGE LIGHT WEIGHT LOCOMOTIVE & TENDER (f)	ACTUAL		REDISPATCHED	
			ASSIGNMENT (g)	TOTAL WEIGHT (h)	ASSIGNMENT (i)	TOTAL WEIGHT (j)
(9)	MK-2, 4	2-8-2	3	945,600 lbs.	-	-
(10)	MK-7, 8, 9	2-8-2	15	4,883,320 lbs.	5	1,876,200 lbs.
(11)	C-9, 10	2-8-0	3	801,840 lbs.	1	267,280 lbs.

DISTRICT (a)		TYPE (b)	ACTUAL (c)	REDISPATCHED (d)
(1)	Yuma - Tucson via Gila	MX-2, 4 2-8-2	3	-
		MX-7, 8, 9 2-8-2	3	-
		C-9, 10 2-8-0	3	3
		P-1 2-10-2	20	-
		P-3, 4, 5 2-10-2	7	-
(2)	Gila - Estrella Helper	MX-7, 8, 9 2-8-2	5	-
		P-3, 4, 5 2-10-2	-	1
		SP-1, 2, 3 4-10-2	-	2
(3)	Tucson - El Paso via Lordsburg	SP-1, 2, 3 4-10-2	25	-
(4)	Tucson - Dragon Helper	MX-7, 8, 9 2-8-2	Included in Yuma-Tucson and Tucson-El Paso Districts	3
		P-3, 4, 5 2-10-2		2
		SP-1, 2, 3 4-10-2		4
		C-9, 10 2-8-0		1
(5)	San Simon Helper	MX-7, 8, 9 2-8-2	3	-
		SP-1, 2, 3 4-10-2	-	2
(6)	Yuma - El Paso via Gila and Lordsburg	AC-8 4-8-8-2	-	30
(7)	Tucson - El Paso, South Line	SP-1, 2, 3 4-10-2	3	3
		MX-7, 8, 9 2-8-2	2	2
(8)	TOTAL		74	53

RECAPITULATION OF ASSIGNMENTS, AND COMPUTATION OF TOTAL WEIGHT AND INVESTMENT						
TYPE (a)		AVERAGE LIGHT WEIGHT LOCOMOTIVE & TENDER (c)	ACTUAL		REDISPATCHED	
			ASSIGNMENT (b)	TOTAL WEIGHT (d)	ASSIGNMENT (e)	TOTAL WEIGHT (f)
(9)	MX-2, 4 2-8-2	315,200 lbs.	3	945,600 lbs.	-	-
(10)	MX-7, 8, 9 2-8-2	375,640 lbs.	15	4,883,320 lbs.	5	1,878,200 lbs.
(11)	C-9, 10 2-8-0	267,250 lbs.	3	801,840 lbs.	1	267,250 lbs.
(12)	P-1 2-10-2	368,740 lbs.	20	7,654,800 lbs.	3	1,148,220 lbs.
(13)	P-3, 4, 5 2-10-2	445,520 lbs.	7	3,118,640 lbs.	3	1,336,560 lbs.
(14)	SP-1, 2, 3 4-10-2	511,700 lbs.	28	14,327,600 lbs.	11	5,628,700 lbs.
(15)	AC-8 4-8-8-2	753,600 lbs.	-	-	30	22,614,000 lbs.
(16)	TOTAL		74	31,731,800 lbs.	53	32,878,980 lbs.
(17)	DECREASE IN LOCOMOTIVE ASSIGNMENT, . . . . . 21					
(18)	DECREASE IN LOCOMOTIVE WEIGHT, . . . . . 1,141,160 lbs.					
(19)	INCREASE IN LOCOMOTIVE INVESTMENT, . . . . . 1,141,160 lbs. @ \$0.249 = \$284,149					

# - AC-8 locomotives purchased 1939 weight 753,600 lbs. locomotive and tender.  
Estimated 1940 price, each, \$168,000; Average per pound \$0.249.

5689

5212



Defendant's Exhibit No. 224 (Witness Sines)  
Jan. 29, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

TUCSON AND RIO GRANDE DIVISIONS  
THROUGH FREIGHT - POOL SERVICE.  
ADDITIONAL CABOOSES AND CABOOSE INVESTMENT  
REQUIRED BY ARIZONA TRAIN LIMIT LAW

LINE NO.	DISTRICT	MONTH	ACTUAL HANDLING			REDISPATCHED HANDLING		
			TRAIN MILES	NUMBER ASSIGNED CABOOSES	AVERAGE MONTHLY MILES	TRAIN MILES	AVERAGE MONTHLY MILES	NUMBER ASSIGNED CABOOSES
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
(1)	Tuma-Gila District	June	58,917	18	3,273	40,490	3,273	13
(2)	Gila-Tucson District	June	60,928	18	3,385	41,600	3,385	13
(3)	Tucson-Lordsburg	June	78,428	23	3,410	51,727	3,410	16
(4)	Lordsburg-El Paso	June	63,945	18	3,553	47,636	3,553	14
(5)	TOTAL MONTH OF JUNE, 1938		262,218	77	3,405	181,453	3,405	56
(6)	DIFFERENCE IN NUMBER OF CABOOSES REQUIRED							21
(7)	Tuma-Gila District	August	35,916	11	3,265	27,675	3,265	9
(8)	Gila-Tucson District	August	37,248	13	2,865	28,800	2,865	10
(9)	Tucson-Lordsburg District	August	44,582	13	3,429	33,352	3,429	10
(10)	Lordsburg-El Paso District	August	36,207	12	3,017	30,651	3,017	10
(11)	TOTAL MONTH OF AUGUST, 1938		153,953	49	3,142	120,478	3,142	39
(12)	DIFFERENCE IN NUMBER OF CABOOSES REQUIRED							10
(13)	ADDITIONAL CABOOSE INVESTMENT - 21 @ \$3,414 =							\$71,694

Defendant's Exhibit No. 225 (Witness B.S. Sines)

Jan. 29, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

YUMA, ARIZONA - EL PASO, TEXAS  
SUMMARY OF INVESTMENT CHARGES AND ANNUAL CHARGES  
INCIDENT TO ADOPTION OF LONG TRAIN OPERATION

	TOTAL INVESTMENT (a)	INTEREST		MAINTENANCE		DEPRECIATION		TOTAL ANNUAL CHARGES (h)
		RATE (b)	AMOUNT (c)	RATE (d)	AMOUNT (e)	RATE (f)	AMOUNT (g)	
Siding Extensions - 125,703 Track Feet	\$ 665,985	4.00%	\$27,439	10¢ per track ft.	\$12,570	-	-	\$40,009
Round House and Shop Facilities	453,832	4.00%	18,153	2.20%	9,984	-	-	28,137
Locomotive Investment	284,149	4.00%	11,366	-	-	2.90%	\$8,240	19,606
Caboose Investment (Decrease)	D 71,594	4.00%	D 2,868	4.93%	D 3,535	3.27%	D2,344	D 8,747
TOTAL	\$1,356,272		\$54,090		\$19,019		\$5,896	\$79,005

D = Decrease

5691

Defendant's Exhibit No. 226 (Witness B.S. Sines)  
Jan. 29, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)  
REDISPATCH STUDY - OPERATING STATISTICS  
YUMA, ARIZONA TO EL PASO, TEXAS  
EXCLUDING PHOENIX LINE  
FOR PERIOD JUNE AND AUGUST, 1938

	NUMBER OF TRAINS (a)	TRAIN MILES (b)	OTHER LOCOMOTIVE MILES (c)	TOTAL LOCOMOTIVE MILES (d)	NUMBER OF CARS (e)	CARS PER TRAIN (f)
<b><u>NORTH LINE</u></b>						
I - Yuma - Oila						
Actual	771	94,833	4,225	99,058	49,940	64.8
Redispatch	554	68,166	1,678	69,844	49,373	89.1
Saving for period	217	26,668	2,548	29,215	(1) 567	24.3
II - Oila - Tucson						
Actual	787	98,176	16,518	114,694	49,488	64.5
Redispatch	550	70,400	10,746	81,146	49,178	89.4
Saving for period	217	27,776	5,772	33,548	(2) 290	24.9
III - Tucson - Lordsburg						
Actual	756	123,010	60,875	183,885	48,840	63.8
Redispatch	521	86,079	39,418	125,497	47,499	91.2
Saving for period	235	37,931	21,457	59,377	(3) 741	27.4
IV - Lordsburg-El Paso (Through trains only)						
Actual	674	100,084	543	100,627	48,256	71.6
Redispatch	521	77,335	1,728	79,063	47,399	91.0
Saving for period	153	22,749	(1) 1,165	21,584	(4) 864	19.4
V - El Paso-Strauss (Turnaround trains only)						
Actual	4	68	-	68	200	(5) 100.0
Redispatch	56	952	-	952	2,800	(5) 100.0
Saving for period	(1) 52	(1) 884	-	(1) 884	(1) 2,800	
VI - TOTAL NORTH LINE						
Actual	2,972	416,171	68,179	484,350	196,103	(6) 66.0
Redispatch	2,202	301,931	53,570	355,501	196,849	(6) 90.1
Saving for period	770	114,840	26,609	141,450	(1) 146	24.1
<b><u>SOUTH LINE</u></b>						
VII - Tucson - Douglas						
Actual	127	15,128	-	15,128	5,956	46.8
Redispatch	122	15,128	-	15,128	6,878	56.4
Saving for period	-	-	-	-	(7) 918	7.6
VIII - Douglas-Bisbee Jct. (Turnaround trains only)						
Actual	52	1,208	-	1,208	2,851	54.8
Redispatch	52	1,208	-	1,208	3,082	59.3
Saving for period	-	-	-	-	(8) 231	4.5
IX - Douglas - El Paso						
Actual	122	26,596	-	26,596	5,965	46.1
Redispatch	122	26,596	-	26,596	6,763	55.4



	NUMBER OF TRAINS	TRAIN MILES	OTHER LOCOMOTIVE MILES	TOTAL LOCOMOTIVE MILES	NUMBER OF CARS	PER TRAIN
	(a)	(b)	(c)	(d)	(e)	(f)
<b><u>NORTH LINE</u></b>						
I - Yuma - Gila	771	98,833	4,223	99,056	49,940	64.8
Actual	554	68,165	1,678	69,843	49,373	69.1
Redispatch	217	30,668	2,545	33,213	(1) 567	24.3
Saving for period						
II - Gila - Tucson	767	98,176	16,518	114,694	49,465	64.5
Actual	550	70,400	10,746	81,146	49,178	69.4
Redispatch	217	27,776	5,772	33,548	(2) 290	24.9
Saving for period						
III - Tucson - Lordsburg	756	123,010	60,675	125,674	48,340	63.8
Actual	521	85,079	39,418	124,497	47,499	91.2
Redispatch	235	37,931	21,457	59,377	(3) 741	27.4
Saving for period						
IV - Lordsburg - El Paso (Through trains only)	674	100,084	543	100,647	48,355	71.6
Actual	521	77,335	1,728	79,063	47,399	91.0
Redispatch	153	22,749	(1) 1,160	21,584	(4) 854	19.4
Saving for period						
V - El Paso - Strauss (Turnaround trains only)	4	66	-	66	300	(5) 100.0
Actual	56	952	-	952	3,600	(5) 100.0
Redispatch	(1) 52	(1) 884	-	(1) 884	(1) 2,600	
Saving for period						
VI - TOTAL NORTH LINE	2,972	416,171	62,179	498,339	196,105	(6) 66.0
Actual	2,802	301,931	53,570	355,501	196,849	(6) 90.1
Redispatch	770	114,240	28,609	142,838	(1) 146	24.1
Saving for period						
<b><u>SOUTH LINE</u></b>						
VII - Tucson - Douglas	123	15,128	-	15,128	5,958	48.8
Actual	122	15,128	-	15,128	6,876	56.4
Redispatch	-	-	-	-	(7) 918	7.6
Saving for period						
VIII - Douglas-Bisbee Jet. (Turnaround trains only)	52	1,208	-	1,208	2,651	54.6
Actual	52	1,208	-	1,208	3,062	59.3
Redispatch	-	-	-	-	(8) 231	4.5
Saving for period						
IX - Douglas - El Paso	122	26,596	-	26,596	5,865	46.1
Actual	122	26,596	-	26,596	6,763	55.4
Redispatch	-	-	-	-	(9) 898	7.3
Saving for period						
X - TOTAL SOUTH LINE	296	42,932	-	42,932	14,674	(10) 60.3
Actual	296	42,932	-	42,932	16,721	(10) 55.9
Redispatch	-	-	-	-	(1) 2,047	7.4
Saving for period						
XI - TOTAL NORTH AND SOUTH LINES	3,268	459,103	62,179	541,271	210,777	(11) 64.7
Actual	2,498	344,863	53,570	398,433	212,970	(11) 86.6
Redispatch	770	114,240	28,609	142,838	2,193	21.9
Saving for period						
XII - PER CENT CHANGE, SAVING vs. ACTUAL	23.6%	24.6%	34.6%	26.4%	-	33.6%
XIII - SAVING FOR YEAR (Saving for period - increased in ratio of 19.6% to 1905)	4,304	638,569	109,918	548,424	-	

- (1) YUMA - GILA DISTRICT: Decrease of 618 engine water cars and 25 deadhead cabooses, and increase of 70 loads which moved via Phoenix Line in actual operation and via Gila Line in redispached operation, produces net decrease of 567 cars.
- (2) GILA - TUCSON DISTRICT: Decrease of 388 engine water cars and 34 deadhead cabooses, and increase of 70 loads which moved via Phoenix Line in actual operation and via Gila Line in redispached operation, produces net decrease of 290 cars.
- (3) TUCSON-LORDSBURG DISTRICT: Decrease of 23 deadhead cabooses, 231 east empties and 642 west empties, which moved North Line in actual operation but South Line in redispached operation, offset by an increase of 155 west empties which reached Tucson on the redispach but which were left at Bowie on the actual, produces a net decrease of 741 cars.
- (4) LORDSBURG-EL PASO DISTRICT: Decrease of 231 east empties and 642 west empties which moved North Line in actual operation but South Line in redispached, offset by an increase of 17 deadhead cabooses in redispached operation, produces net decrease of 856 cars.
- (5) EL PASO - STRAUSS DISTRICT: Average cars per train computed for Strauss turnarounds in westward direction only (two trains in actual, and 28 trains in redispach) as eastward trains were without cars.
- (6) TOTAL NORTH LINE: Average cars per train computed, omitting El Paso-Strauss turnaround trains and cars handled by those trains.
- (7) TUCSON - DOUGLAS DISTRICT: Increase of 231 east empties, and 642 west empties which moved North Line in actual operation but South Line in redispached, plus 20 westward empties which reached Tucson on the redispach but which were left at Douglas on the actual, plus 25 west empties which reached Tucson on the redispach, but which were left at Rodeo on the actual in order to comply with the law, produces total increase of 918 cars.
- (8) DOUGLAS - BISBEE JCT. (Turnaround trains only): Increase of 231 empties handled Douglas to Bisbee Jct., by redispached turnaround trains to avoid helping redispached through westward trains Douglas to Bisbee Jct.
- (9) DOUGLAS - EL PASO DISTRICT: Increase of 231 east empties and 642 west empties which moved North Line in actual operation but South Line in redispached, plus 25 westward empties which reached Douglas (and Tucson) on the redispach, but which were left at Rodeo on the actual in order to comply with the law, produces a total increase of 898 cars.
- (10) TOTAL SOUTH LINE: Average cars per train computed omitting Douglas-Bisbee Jct., turnaround trains and cars handled by those trains.
- (11) TOTAL NORTH AND SOUTH LINES: Average cars per train computed omitting Strauss and Douglas-Bisbee Jct., turnaround trains and cars handled by those trains:-

ACTUAL:	4 Strauss turns with	200 cars
	52 Douglas-Bisbee Jct. turns	2,851 cars
	56 trains omitted with	3,051 cars
REDISPACH:	56 Strauss turns with	2,800 cars
	52 Douglas-Bisbee Jct. turns	3,082 cars
	106 trains omitted with	5,882 cars

DERIVATION OF RATIO - 17.89%		
	GROSS TON MILES (Thousands)	
	YEAR 1936	PERIOD JUNE AND AUGUST
Yuma - Tucson	2,844,436	428,345
Tucson - Lordsburg	1,747,385	308,788
Lordsburg - El Paso	1,588,785	279,790
Tucson - El Paso vi Douglas	457,857	75,158
TOTAL	6,404,373	1,144,081
Per Cent total period June and August to year 1936	17.890%	



# Defendant's Exhibit No. 227 (Witness Sines)

~~JANXXXX~~ Jan. 30, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

ARRIVAL TIME AT EL PASO, TEXAS  
OF FRUIT BLOCKS AND MANIFEST SECTIONS, ACTUAL  
OPERATION COMPARED WITH REDISPATCHED OPERATION,  
WITH NO RESTRICTION AND USING AC POWER AND LONG  
SIDINGS.

MONTHS OF JUNE AND AUGUST, 1938

## SUMMARY

JUNE, 1938	
(1) NUMBER OF TRAINS ARRIVING EL PASO - ACTUAL, . . . . .	200
(2) NUMBER OF TRAINS ARRIVING EL PASO - REDISPATCHED, . . . . .	147
(3) NUMBER OF BLOCKS AND MANIFEST SECTIONS INVOLVED - ACTUAL, . . . . .	231
REDISPATCHED, . . . . .	221
(4) NUMBER OF REDISPATCHED BLOCKS ARRIVING EL PASO -	
(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	14
(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	126
(c) LATER THAN ACTUAL BLOCKS, . . . . .	92
(5) TOTAL TIME -	
(a) IN ADVANCE OF ACTUAL, . . . . .	119 HOURS 13 MINUTES
(b) LATER THAN ACTUAL, . . . . .	81 HOURS 23 MINUTES
(6) AVERAGE TIME OF 126 BLOCKS IN ADVANCE OF ACTUAL, . . . . .	57 MINUTES
(7) AVERAGE TIME OF 91 BLOCKS LATER THAN ACTUAL, . . . . .	53 MINUTES
AUGUST, 1938	
(1) NUMBER OF TRAINS ARRIVING EL PASO - ACTUAL, . . . . .	117
(2) NUMBER OF TRAINS ARRIVING EL PASO - REDISPATCHED, . . . . .	95
(3) NUMBER OF BLOCKS AND MANIFEST SECTION INVOLVED - ACTUAL, . . . . .	147
REDISPATCHED, . . . . .	141
(4) NUMBER OF REDISPATCHED BLOCKS ARRIVING EL PASO -	
(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	18
(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	75
(c) LATER THAN ACTUAL BLOCKS, . . . . .	54
(5) TOTAL TIME -	
(a) IN ADVANCE OF ACTUAL, . . . . .	127 HOURS 40 MINUTES
(b) LATER THAN ACTUAL, . . . . .	44 HOURS 31 MINUTES
(6) AVERAGE TIME OF 75 BLOCKS IN ADVANCE OF ACTUAL, . . . . .	1 HOUR 34 MINUTES
(7) AVERAGE TIME OF 54 BLOCKS LATER THAN ACTUAL, . . . . .	49 MINUTES

## SUMMARY

<u>JUNE, 1938</u>	
(1) NUMBER OF TRAINS ARRIVING EL PASO - ACTUAL, . . . . .	200
(2) NUMBER OF TRAINS ARRIVING EL PASO - REDISPATCHED, . . . . .	147
(3) NUMBER OF BLOCKS AND MANIFEST SECTIONS INVOLVED - ACTUAL, . . . . .	231
REDISPATCHED, . . . . .	221
(4) NUMBER OF REDISPATCHED BLOCKS ARRIVING EL PASO -	
(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	14
(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	126
(c) LATER THAN ACTUAL BLOCKS, . . . . .	92
(5) TOTAL TIME -	
(a) IN ADVANCE OF ACTUAL, . . . . .	119 HOURS 13 MINUTES
(b) LATER THAN ACTUAL, . . . . .	81 HOURS 23 MINUTES
(6) AVERAGE TIME OF 126 BLOCKS IN ADVANCE OF ACTUAL, . . . . .	57 MINUTES
(7) AVERAGE TIME OF 91 BLOCKS LATER THAN ACTUAL, . . . . .	53 MINUTES
<u>AUGUST, 1938</u>	
(1) NUMBER OF TRAINS ARRIVING EL PASO - ACTUAL, . . . . .	117
(2) NUMBER OF TRAINS ARRIVING EL PASO - REDISPATCHED, . . . . .	95
(3) NUMBER OF BLOCKS AND MANIFEST SECTION INVOLVED - ACTUAL, . . . . .	147
REDISPATCHED, . . . . .	141
(4) NUMBER OF REDISPATCHED BLOCKS ARRIVING EL PASO -	
(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	18
(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	75
(c) LATER THAN ACTUAL BLOCKS, . . . . .	54
(5) TOTAL TIME -	
(a) IN ADVANCE OF ACTUAL, . . . . .	117 HOURS 40 MINUTES
(b) LATER THAN ACTUAL, . . . . .	44 HOURS 31 MINUTES
(6) AVERAGE TIME OF 75 BLOCKS IN ADVANCE OF ACTUAL, . . . . .	1 HOUR 34 MINUTES
(7) AVERAGE TIME OF 54 BLOCKS LATER THAN ACTUAL, . . . . .	49 MINUTES

A = ARIZONA PERISHABLE BLOCK

C = COLTON FRUIT BLOCK

Y = YUMA PERISHABLE BLOCK

CY = COLTON OVERFLOW ON YUMA BLOCK ON COLTON SCHEDULE

M = MEXICAN PERISHABLE

SEE = SUNSET EAST MANIFEST

JUNE 1968

DATE	PERMISSIBLE BLOCK OR MANIFEST IDENTIFICATION	ACTUAL ARRIVAL EL PASO	PERMISSIBLE BLOCK OR MANIFEST IDENTIFICATION	REDISPATCHED ARRIVAL EL PASO	REDISPATCHED IN ADVANCE OF ACTUAL	REDISPATCHED LATER TIME ACTUAL	OPERATING BASE AS ACTUAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
2	C 365 Y 367 Y 368	2:10 AM # 3:25 PM # 3:35 PM	C 365 Y 367 Y 368	2:05 AM # 3:10 PM	5 Mins 15 Mins 45 Mins		
3	CT 365 C 366 C 367 Y 369 Y 360	1:25 AM 2:45 AM 9:30 AM # 2:35 PM # 3:15 PM	CT 365 C 366 C 367 Y 369 Y 360	2:45 AM 9:45 AM # 3:05 PM		4 Hrs 20 Mins 3 Hrs 00 Mins 15 Mins 1 Hr 15 Mins 35 Mins	
4	CT 367 C 368 C 369 CT 369 C 370 Y 361 Y 362	4:00 AM 6:45 AM 9:00 AM 10:15 AM # 4:00 PM # 7:05 PM	CT 367 C 368 C 369 CT 369 C 370 Y 361 Y 362	4:20 AM 8:05 AM 10:15 AM # 6:05 PM	55 Mins 1 Hr 00 Mins	20 Mins 20 Mins 1 Hr 20 Mins 2 Hrs 3 Mins	Same
5	CT 370 C 371 C 372 C 373 CT 373 Y 365 Y 366	5:45 AM 7:00 AM 9:30 AM 10:30 AM # 3:25 PM # 4:15 PM	CT 370 C 371 C 372 C 373 CT 373 Y 365 Y 366	5:00 AM 6:20 AM 9:00 AM # 3:30 PM	45 Mins 45 Mins 40 Mins 20 Mins 1 Hr 30 Mins 45 Mins	5 Mins	
6	CT 373-A C 374 C 375 CT 375 C 376 Y 365 Y 366 Y 367	4:55 AM 8:50 AM 9:05 AM 9:10 AM 10:35 AM # 3:40 PM # 6:35 PM	CT 373-A C 374 C 375 CT 375 C 376 Y 365 Y 366 Y 367	4:30 AM 7:30 AM 8:55 AM 10:35 AM # 3:45 PM # 3:55 PM	20 Mins 1 Hr 20 Mins 10 Mins 15 Mins 57 Mins 57 Mins 2 Hrs 55 Mins		Same
7	CT 376 C 377 C 378 C 379 Y 368 Y 369 Y 370	5:20 AM 6:20 AM 8:15 AM 11:30 AM # 5:55 PM # 6:35 PM	CT 376 C 377 C 378 C 379 Y 368 Y 369 Y 370	7:45 AM 9:05 AM 11:00 AM # 7:25 PM # 2:35 PM	30 Mins 3 Hrs 21 Mins 4 Hrs 00 Mins	2 Hrs 20 Mins 1 Hr 20 Mins 20 Mins 1 Hr 35 Mins	
8	C 380 C 381 Y 371 Y 372 Y 373 Y 374	2:20 AM 11:00 AM # 4:30 PM # 4:50 PM # 5:55 PM # 6:35 PM	C 380 C 381 Y 371 Y 372 Y 373 Y 374	3:00 AM 9:55 AM # 5:15 PM # 6:25 PM	1 Hr 20 Mins 9 Mins	10 Mins 42 Mins 22 Mins 25 Mins	
9	CT 381 C 382 C 383 C 384 Y 375 Part Y 376 Part Y 376 Y 377 Y 378	1:20 PM 1:50 PM 2:05 PM 2:10 PM # 5:55 PM # 7:15 PM # 7:25 PM	CT 381 C 382 C 383 C 384 Y 375 Y 376 Y 377 Y 378	1:00 PM 1:30 PM 2:10 PM # 5:25 PM (5:25 PM) # 5:25 PM # 5:25 PM	20 Mins 20 Mins 32 Mins 25 Mins 1 Hr 45 Mins 1 Hr 45 Mins 1 Hr 30 Mins	5 Mins	Same
10	CT 384 C 385 C 386 C 387 C 388 Y 379 Part Y 380 Part Y 380 Y 381 Y 382 Y 383	6:55 AM 7:05 AM 9:05 AM 11:35 AM 12:45 PM # 4:05 PM # 6:05 PM # 6:45 PM # 7:20 PM	Part CT 384 C 385 Part CT 384 C 387 C 388 Y 379 Y 380 Y 381 Y 382 Y 383	6:20 AM 8:45 AM 11:40 AM # 2:55 PM (2:55 PM) # 3:15 PM # 6:25 PM	35 Mins 45 Mins 20 Mins 1 Hr 05 Mins 1 Hr 12 Mins 1 Hr 12 Mins 3 Hr 12 Mins 50 Mins 20 Mins 22 Mins	1 Hr 50 Mins 5 Mins	
11	CT 388 C 389 C 390 C 391	4:20 AM 6:40 AM 12:25 PM	CT 388 C 389 C 390 CT 391	4:55 AM 7:00 AM		5 Mins 5 Mins 20 Mins 1 Hr 5 Mins	



4	CY 367) C 368) C 369 CY 369 C 370 Y 361 Y 362	4:00 AM 6:45 AM 9:00 AM 10:15 AM 4:00 PM 7:05 PM	C. 367. C 368) C 369) CY 369) C 370 Y 361) Y 362)	4:20 AM 6:05 AM 10:15 AM 6:05 PM	50 Mins 1 Hr 00 Mins	20 Mins 1 Hr 30 Mins 2 Hrs 3 Mins	Same
5	CY 370) C 371) C 372 C 373 CY 373 Y 365 Y 366 Y 367	5:45 AM 7:00 AM 9:30 AM 10:30 AM 3:35 PM 4:15 PM	CY 370) C 371) C 372 C 373) CY 373) Y 365) Y 366) Y 367)	6:00 AM 6:20 AM 9:00 AM 3:30 PM	45 Mins 45 Mins 40 Mins 30 Mins 1 Hr 30 Mins 45 Mins	5 Mins	
6	CY 373-A C 374 C 375 CY 375 C 376 Y 368) Y 369) Y 369	4:55 AM 8:50 AM 9:05 AM 9:10 AM 10:35 AM 3:40 PM 6:35 PM	CY 373-A C 374 C 375) CY 375) C 376 Y 368) Y 369) Y 369	4:30 AM 7:30 AM 8:55 AM 10:35 AM 3:45 PM 3:30 PM	25 Mins 1 Hr 20 Mins 10 Mins 15 Mins 57 Mins 57 Mins 2 Hrs 55 Mins		Same
7	CY 374 C 377 C 378 C 379 Y 368) Y 369) Y 370	5:20 AM 6:20 AM 6:15 AM 11:30 AM 5:55 PM 6:35 PM	CY 374) C 377) C 378 C 379 Y 368 Y 369) Y 370)	7:45 AM 9:00 AM 11:00 AM 7:35 PM 2:35 PM	30 Mins 3 Hrs 21 Mins 4 Hrs 00 Mins	2 Hrs 20 Mins 2 Hr 25 Mins 50 Mins 1 Hr 30 Mins	
8	C 380 C 381 Y 371 Y 372 Y 373 Y 374	8:50 AM 11:00 AM 4:30 PM 4:50 PM 8:55 PM 6:32 PM	C 380 C 381 Y 371) Y 372) Y 373) Y 374)	3:00 AM 9:35 AM 5:12 PM 6:25 PM	1 Hr 25 Mins 9 Mins	10 Mins 42 Mins 22 Mins 25 Mins	
9	CY 381 C 382 C 383 C 384 Y 375) Part Y 376) Part Y 376) Y 377) Y 378	1:20 PM 1:50 PM 2:05 PM 2:10 PM 5:55 PM 7:15 PM 7:25 PM	CY 381 C 382 C 383) C 384) Y 375) Y 376) Y 377) Y 378	1:00 PM 1:30 PM 2:10 PM 5:25 PM (5:29 PM) 5:29 PM 5:55 PM	20 Mins 20 Mins 32 Mins 24 Mins 1 Hr 46 Mins 1 Hr 46 Mins 1 Hr 50 Mins	5 Mins 	Same
10	CY 384 C 385 C 386 C 387 C 388 Y 379) Part Y 380) Part Y 380) Y 381) Y 382 Y 383	6:55 AM 7:05 AM 9:05 AM 11:35 AM 12:45 PM 4:05 PM 6:05 PM 6:45 PM 7:20 PM	Part CY 384) C 385) Part CY 384) C 386) C 387) C 388) Y 379) Y 380) Y 381 Y 382) Y 383)	6:20 AM 8:45 AM 11:40 AM 2:05 PM (2:05 PM) 5:15 PM 6:20 PM	35 Mins 45 Mins 20 Mins 1 Hr 05 Mins 1 Hr 12 Mins 1 Hr 12 Mins 5 Hr 12 Mins 50 Mins 20 Mins 52 Mins	1 Hr 50 Mins 5 Mins	
11	CY 389) C 389) C 390 C 391 CY 391 Y 384) Part Y 385) Part Y 385) Y 386 Y 387 Y 388	4:50 AM 6:40 AM 12:25 PM 1:10 PM 4:25 PM 5:20 PM 6:40 PM 7:30 PM	CY 389) C 389) C 390 CY 391) C 391) Y 384 Y 385) Y 386) Y 387) Y 388)	4:55 AM 7:00 AM 1:50 PM 3:45 PM (4:29 PM) 4:29 PM 7:05 PM	1 Hr 10 Mins 24 Mins 51 Mins 51 Mins 27 Mins	5 Mins 5 Mins 20 Mins 1 Hr 5 Mins 20 Mins	
12	CY 391-A C 392 C 393 C 394 C 395 Y 389 Y 390 Y 391	6:25 AM 8:35 AM 9:10 AM 11:00 AM 12:10 PM 2:20 PM 4:00 PM 4:05 PM	CY 391-A C 392) C 393) C 394 C 395 Y 389 Y 390) Y 391)	5:50 AM 7:05 AM 8:15 AM 11:55 AM 2:30 PM 4:00 PM	30 Mins 1 Hr 30 Mins 2 Hr 05 Mins 2 Hrs 45 Mins 15 Mins 6 Mins	10 Mins 	Same

• - Ice House Arrive.

5695

3215

JUNE 1966

DATE	PERISHABLE BLOCK OR MANIFEST IDENTIFICATION	ACTUAL ARRIVAL EL PASO	PERISHABLE BLOCK OR MANIFEST IDENTIFICATION	RED SPATCHED ARRIVAL EL PASO	RED SPATCHED IN ADVANCE OF ACTUAL	RED SPATCHED LATER THAN ACTUAL	OPERATIONS SAME AS ACTUAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
13	CT 396 C 396 C 397 CT 397 SEE 3-11 C 398 Y 397 Y 398 Y 394	6:00 AM 6:20 AM 7:45 AM 8:20 AM 11:00 AM 12:00 PM 2:45 PM 4:30 PM 5:10 PM	CT 396 C 396 C 397 CT 397 SEE 3-11 C 398 Y 397 Y 398 Y 394	6:00 AM 4:00 PM 6:00 AM 11:20 AM 2:50 PM 4:20 PM	2 Hrs 25 Mins 30 Mins 30 Mins 40 Mins 11 Mins	30 Mins 30 Mins 30 Mins	Same
14	C 399 CT 399 C 400 C 401 CT 401 Y 395 Y 396 Y 397	4:10 AM 7:00 AM 7:00 AM 12:30 PM 1:30 PM 5:27 PM 6:55 PM	C 399 CT 399 C 400 C 401 CT 401 Y 395 Y 396 Y 397	6:00 AM 6:30 AM 12:45 PM 5:05 PM 7:00 PM	3 Hrs 50 Mins 10 Mins 34 Mins 10 Mins 45 Mins 24 Mins	1 Hr 30 Mins 7 Mins	Same
15	C 402 C 402 CT 403 Y 398 Y 399 Y 300 Y 301	6:00 AM 8:05 AM 8:50 AM 3:30 PM 4:15 PM 4:25 PM 5:25 PM	C 402 C 402 CT 403 Y 398 Y 399 Y 300 Y 301	6:30 AM 8:50 AM 8:45 PM 4:00 PM 6:00 PM	30 Mins 30 Mins 55 Mins 15 Mins 20 Mins	30 Mins 45 Mins	Same
16	CT 403-A C 404 C 405 C 406 Y 302 Y 303 Y 304	5:40 AM 6:20 AM 8:30 AM 8:30 AM 2:50 PM 3:15 PM 4:30 PM	CT 403-A C 404 C 405 C 406 Y 302 Y 303 Y 304	6:10 AM 4:05 AM 9:15 AM 2:52 PM 2:45 PM	30 Mins 30 Mins 27 Mins 3 Mins 1 Hr 45 Mins	45 Mins 20 Mins	Same
17	CT 406 C 407 C 408 CT 408 C 409 Y 305 Y 306 Y 307	3:40 AM 4:00 AM 6:10 AM 6:30 AM 8:30 AM 3:00 PM 3:11 PM 4:34 PM	CT 406 C 407 C 408 CT 408 C 409 Y 305 Y 306 Y 307	3:30 AM 4:15 AM 6:00 AM 6:00 AM 8:25 AM 2:45 PM 3:18 PM	5 Mins 3 Mins 20 Mins 20 Mins 15 Mins 1 Hr 15 Mins	15 Mins	Same
18	CT 409 C 410 C 411 CT 411 C 412 Y 308 Y 309 Y 310 Y 311	4:05 AM 6:30 AM 6:40 AM 8:30 AM 9:45 AM 3:12 PM 5:22 PM 5:40 PM 6:15 PM	CT 409 C 410 C 411 CT 411 C 412 Y 308 Y 309 Y 310 Y 311	3:55 AM 6:00 AM 7:05 AM 9:20 AM 5:07 PM 5:54 PM	10 Mins 1 Hr 30 Mins 1 Hr 20 Mins 20 Mins 20 Mins 21 Mins	20 Mins 1 Hr 50 Mins 14 Mins	Same
19	CT 412 Part C 413 C 414 Part C 413 CT 414 C 415 Y 312 Y 313 Y 314 Y 315	3:45 AM 9:20 AM 11:40 AM 12:40 PM 2:50 PM 4:35 PM 5:00 PM 5:20 PM	CT 412 C 413 C 414 CT 414 C 415 Y 312 Y 313 Y 314 Y 315	3:25 AM 10:15 AM (10:15 AM) 10:20 AM 12:45 PM 2:35 PM 4:21 PM 5:00 PM	20 Mins 1 Hr 20 Mins 1 Hr 20 Mins 15 Mins 14 Mins 17 Mins	40 Mins 45 Mins 5 Mins 3 Mins	Same
20	CT 415 C 416 C 417 CT 417 C 418 Y 316	5:40 AM 9:30 AM 10:25 AM 11:10 AM 2:20 PM	CT 415 C 416 C 417 CT 417 C 418 Y 316	6:15 AM 6:20 AM 10:40 AM 2:20 PM	30 Mins 1 Hr 27 Mins 30 Mins	30 Mins 30 Mins 31 Mins 19 Mins	Same



	C 401 CY 401 Y 295 Y 296 Y 297	1:30 PM 5:27 PM 6:55 PM	CY 401 Y 295 Y 296 Y 297	12:45 PM 5:05 PM 7:02 PM	45 Mins 25 Mins	1 Hr 35 Mins 7 Mins	
15	C 402 C 403 CY 403 Y 298 Y 299 Y 300 Y 301	8:05 AM 8:05 AM 8:50 AM 3:38 PM 4:15 PM 4:25 PM 5:25 PM	C 402 C 403 CY 403 Y 298 Y 299 Y 300 Y 301	8:35 AM 8:50 AM 8:43 PM 4:00 PM 6:00 PM	55 Mins 15 Mins 25 Mins	30 Mins 45 Mins	Same
16	CY 403-A C 404 C 405 C 406 Y 302 Y 303 Y 304	5:40 AM 4:35 AM 8:30 AM 8:50 AM 2:58 PM 3:15 PM 4:30 PM	CY 403-A C 404 C 405 C 406 Y 302 Y 303 Y 304	5:10 AM 6:05 AM 9:15 AM 8:32 PM 2:45 PM	30 Mins 30 Mins 27 Mins 30 Mins 1 Hr 45 Mins	45 Mins 20 Mins	
17	CY 406 C 407 C 408 CY 408 C 409 Y 305 Y 306 Y 307	3:40 AM 4:00 AM 6:10 AM 6:30 AM 8:50 AM 3:00 PM 3:11 PM 4:34 PM	CY 406 C 407 C 408 CY 408 C 409 Y 305 Y 306 Y 307	3:35 AM 4:15 AM 6:05 AM 8:25 AM 2:45 PM 3:15 PM	5 Mins 5 Mins 25 Mins 25 Mins 15 Mins 1 Hr 15 Mins	15 Mins 5 Mins	
18	CY 409 C 410 C 411 CY 411 C 412 Y 308 Y 309 Y 310 Y 311	4:05 AM 6:30 AM 6:45 AM 8:50 AM 9:45 AM 3:12 PM 5:32 PM 5:40 PM 6:15 PM	CY 409 C 410 C 411 CY 411 C 412 Y 308 Y 309 Y 310 Y 311	3:55 AM 5:00 AM 7:05 AM 9:20 AM 5:07 PM 6:54 PM	10 Mins 1 Hr 30 Mins 1 Hr 25 Mins 25 Mins 25 Mins 21 Mins	25 Mins 1 Hr 55 Mins 14 Mins	
19	CY 412 Part C 413 C 414 Part C 415 CY 414 C 415 Y 312 Y 313 Y 314 Y 315	3:45 AM 9:35 AM 11:40 AM 12:40 PM 2:00 PM 4:35 PM 5:00 PM 5:20 PM	CY 412 C 413 C 414 CY 414 C 415 Y 312 Y 313 Y 314 Y 315	3:25 AM 10:15 AM (10:15 AM) 10:20 AM 12:45 PM 2:35 PM 4:21 PM 5:05 PM	20 Mins 40 Mins 45 Mins 1 Hr 25 Mins 1 Hr 20 Mins 15 Mins 14 Mins 17 Mins	40 Mins 45 Mins 5 Mins 5 Mins 35 Mins 35 Mins	
20	CY 415 C 416 C 417 CY 417 C 418 Y 316 Y 317 Y 318 Y 319	5:40 AM 9:50 AM 10:25 AM 11:10 AM 8:20 PM 2:32 PM 4:40 PM 4:55 PM	CY 415 C 416 C 417 CY 417 C 418 Y 316 Y 317 Y 318 Y 319	6:15 AM 8:25 AM 10:40 AM 2:51 PM 4:35 PM	35 Mins 1 Hr 27 Mins 30 Mins 5 Mins 20 Mins	35 Mins 31 Mins 19 Mins	
21	CY 418 C 419 CY 419 C 420 Y 321 Y 322 Y 323	4:40 AM 5:00 AM 8:38 AM 8:50 AM 2:29 PM 3:25 PM 5:25 PM	CY 418 C 419 CY 419 C 420 Y 321 Y 322 Y 323	4:25 AM 4:34 AM 9:10 AM 4:50 PM 2:25 PM	15 Mins 25 Mins 1 Hr 05 Mins 5 Hrs 20 Mins	50 Mins 2 Hrs 21 Mins 1 Hr 25 Mins	

8 - Ice House Arrival

88 - Complicated at Conway account engine failure

5696

3219

JUNE 1958

(Sheet 4 of 6 sheets)

DATE	PERMANENT BLOCK OR MAILFEST IDENTIFICATION	ACTUAL ARRIVAL EL PASO	PERMANENT BLOCK OR MAILFEST IDENTIFICATION	REDISPATCHED ARRIVAL EL PASO	REDISPATCHED IN ADVANCE OF ACTUAL	REDISPATCHED LATER THAN ACTUAL	OPERATIONS SAME AS ACTUAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
22	C 421) C 422) CY 422 Y 322 Y 324 Y 325	6:15 AM 6:15 AM 10:00 AM 12:10 PM 1:30 PM	C 421 C 422) CY 422) Y 322) Y 324) Y 325	10:40 PM (21st) 6:00 AM 10:00 AM 8:00 PM	7 Hrs 25 Mins 15 Mins 15 Mins 1 Hr 15 Mins	1 Hr 20 Mins	Same
23	CT 422-A C 422 C 424 Y 322 Y 327 Y 328	6:40 AM 6:20 AM 9:20 AM 8:43 PM 8:55 PM 8:15 PM	CT 422-A) C 422 ) C 424 Y 322 Y 327) Y 328)	6:30 AM 11:00 AM 8:10 PM 4:07 PM	15 Mins	1 Hr 55 Mins 15 Mins 1 Hr 40 Mins 1 Hr 05 Mins	Same
24	CT 422 C 422 C 422 C 427 Y 322) Part Y 320) Part Y 320) Y 321)	6:00 AM 6:40 AM 7:00 AM 8:25 AM 8:40 PM 7:15 PM	CT 422 C 422) C 422) C 427 Y 322 Y 320) Y 321)	6:00 AM 7:40 AM 9:15 AM 5:30 PM (6:45 PM) 6:45 PM	10 Mins 20 Mins 20 Mins	1 Hr 00 Mins 40 Mins 50 Mins 3 Hrs 05 Mins	Same
25	CT 427) C 422)	7:00 AM	CT 427 C 422)	4:35 AM	2 Hrs 25 Mins	2 Hrs 05 Mins	
26	C 422 C 420 Y 322 Y 322 Y 324	8:45 AM 11:10 AM 8:45 PM 8:05 PM 8:55 PM	C 422) C 420 Y 322 CY 323) Y 324)	9:05 AM 11:20 AM 8:00 PM 8:55 PM		20 Mins 20 Mins 5 Mins 50 Mins	Same
27	C 421 CT 420 C 422 C 422 Y 322) Part Y 327) Part Y 327) Part Y 320) Part Y 320) Y 322)	7:00 AM 7:40 AM 8:00 AM 11:20 AM 8:20 PM 6:40 PM 6:50 PM	C 421) CT 420) C 422 C 422 Y 322 ) Y 327) Y 320) Y 322)	8:30 AM 9:10 AM 11:10 AM (9:14 PM) 7:27 PM 8:14 PM	10 Mins 6 Mins 1 Hr 35 Mins	1 Hr 30 Mins 50 Mins 20 Mins 2 Hrs 17 Mins 07 Mins 07 Mins 47 Mins	Same
28	CT 422 C 424 C 422 C 422 CT 422 Y 320) Part Y 320) Part Y 320) Y 322)	5:00 AM 6:20 AM 9:20 AM 11:20 AM 11:45 AM 4:45 PM 5:00 PM 6:00 PM	CT 422 C 424 C 422 C 422) CT 422) Y 320) Y 341) Y 342)	5:30 AM 4:50 AM 9:40 AM 11:20 AM 4:05 PM (4:05 PM) 6:32 PM	25 Mins 1 Hr 30 Mins 50 Mins 10 Mins 40 Mins 55 Mins 8 Mins	1 Hr 32 Mins	Same
29	Part CT 422-A) C 427 ) Part CT 422-A) C 422 ) C 422 C 440 Y 342) Part Y 342) Y 342) Part Y 342) Y 342	7:20 AM 9:20 AM 10:40 AM 12:15 PM 4:20 PM 5:45 PM 6:20 PM	CT 422-A C 427 C 422 C 422) C 440) Y 342) Y 342) Y 342) Y 342)	4:35 AM 6:10 AM (4:35 AM) 8:00 AM 12:15 PM 4:02 PM (4:02 PM) 6:44 PM	3 Hrs 15 Mins 1 Hr 40 Mins 4 Hrs 55 Mins 1 Hr 20 Mins 20 Mins 20 Mins 1 Hr 41 Mins 6 Mins	1 Hr 35 Mins 1 Hr 1 Min	Same
30	C 441 C 442 Y 347 Y 348 Y 349 Y 350	4:25 AM 10:10 AM 3:50 PM 4:32 PM 6:30 PM 6:45 PM	C 441 C 442 Y 347) Y 348) Y 349) Y 350)	4:40 AM 9:45 AM 5:15 PM 6:45 PM	15 Mins 25 Mins	1 Hr 25 Mins 07 Mins 15 Mins	Same
31	CT 442 C 442 CT 442	1:40 AM 6:10 AM 7:55 AM	CT 442 C 442) CT 442)	2:20 AM 8:07 AM	3 Mins 1 Hr 45 Mins	40 Mins	



	Y 388 Y 387 Y 388	# 8:45 PM 8:50 PM 8:15 PM	Y 388 Y 387 Y 388	# 8:10 AM 8:07 PM	13 Mins	1 Hr 08 Mins	
24	OT 424 C 425 C 426 C 427 Y 389 Part Y 390 Part Y 390 Y 391	8:00 AM 8:40 AM 7:00 AM 8:25 AM 8:40 PM 7:15 PM	OT 424 C 425 C 426 C 427 Y 389 Y 391	8:00 AM 7:40 AM 9:15 AM 8:30 PM (8:45 PM) 8:45 PM	1 Hr 00 Mins 40 Mins 50 Mins 10 Mins 20 Mins 20 Mins	1 Hr 00 Mins 40 Mins 50 Mins 3 Hrs 08 Mins	Same
25	OT 427 C 428  C 429 C 430 Y 328 Y 323 Y 324	7:00 AM 8:45 AM 11:10 AM 8:45 PM 8:05 PM 8:55 PM	OT 427 C 428 C 429 C 430 Y 328 Y 323 Y 324	8:05 AM 11:30 AM 8:50 PM 8:55 PM	2 Hrs 25 Mins 20 Mins 20 Mins 5 Mins 50 Mins	2 Hrs 05 Mins 20 Mins 20 Mins 5 Mins 50 Mins	Same
26	C 431 OT 430 C 432 C 433 Y 326 Part Y 327 Part Y 327 Part Y 328 Part Y 328 Y 328	7:00 AM 7:40 AM 8:50 AM 11:20 AM 8:20 PM 8:40 PM 8:50 PM	C 431 OT 430 C 432 C 433 Y 326 Y 327 Y 328	8:30 AM 9:10 AM 11:10 AM (8:14 PM) 7:57 PM	10 Mins 4 Mins 1 Hr 35 Mins	1 Hr 30 Mins 50 Mins 20 Mins 2 Hrs 17 Mins 27 Mins 27 Mins 47 Mins	
27	OT 435 C 434 C 435 C 436 OT 436 Y 339 Part Y 340 Part Y 340 Y 341 Y 342	3:55 AM 8:35 AM 9:35 AM 11:35 AM 11:45 AM 4:45 PM 8:00 PM 8:40 PM	OT 435 C 434 C 435 C 436 OT 436 Y 339 Y 340 Y 341 Y 342	3:30 AM 4:50 AM 8:45 AM 11:35 AM 4:05 PM (4:05 PM)	20 Mins 1 Hr 35 Mins 50 Mins 10 Mins 40 Mins 40 Mins 55 Mins	1 Hr 35 Mins	Same
28	Part OT 434-A C 437 Part OT 434-A C 438 C 439 C 440 Y 343 Part Y 344 Y 345 Part Y 344 Y 346	7:50 AM 9:30 AM 10:40 AM 12:15 PM 8:20 PM 8:45 PM 8:50 PM	OT 434-A C 437 C 438 C 439 C 440 Y 343 Y 344 Y 345 Y 346	4:35 AM 8:10 AM (4:35 AM) 8:00 AM 12:15 PM 4:02 PM (4:02 PM) 8:44 PM	3 Hrs 15 Mins 1 Hr 40 Mins 4 Hrs 55 Mins 1 Hr 30 Mins 20 Mins 20 Mins 1 Hr 41 Mins 5 Mins	1 Hr 30 Mins 1 Hr 1 Min	Same
29	C 441 C 442 Y 347 Y 348 Y 349 Y 350	4:55 AM 10:10 AM 3:50 PM 4:51 PM 6:30 PM 8:45 PM	C 441 C 442 Y 347 Y 348 Y 349 Y 350	4:40 AM 9:45 AM 8:15 PM 8:45 PM	15 Mins 25 Mins 1 Hr 25 Mins 27 Mins 15 Mins	1 Hr 25 Mins 27 Mins 15 Mins	Same
30	OT 442 C 443 OT 443 C 444 Part Y 351 Y 352 Y 353 Part Y 351 Y 354 OT 444 A 28	1:40 AM 8:10 AM 7:55 AM 10:50 AM 3:55 PM 5:30 PM 8:17 PM 11:40 PM	OT 442 C 443 OT 443 C 444 Y 351 Y 352 Y 353 Y 354 OT 444 A 28	2:50 AM 6:07 AM 11:15 AM 4:07 PM (4:07 PM) 8:21 PM 11:40 PM	3 Mins 1 Hr 45 Mins 20 Mins 30 Mins	40 Mins 25 Mins 1 Hr 2 Mins 51 Mins 4 Mins	Same Same

# - Ice House arrival

# - Consolidated (Y-388 and Y-338)

5697

3220

AUGUST 1938

DATE (a)	PERISHABLE BLOCK OR MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL AT PASO (c)	PERISHABLE BLOCK OR MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL AT PASO (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	OPERATIONS SAME AS ACTUAL (h)
2	C 534 C 535	10:10 AM 11:15 AM	C 534 C 535	7:35 AM 10:10 AM	2 Hrs 35 Mins 1 Hr 05 Mins		
3	A 124) C 536) C 537) CY 537) A 125 ) CY 537-A)	12:15 AM 12:15 AM 11:50 AM 9:25 PM	A 124) C 536) C 537) CY 537) A 125 ) CY 537-A)	1:05 AM 11:15 AM 9:10 PM	35 Mins 15 Mins 15 Mins	50 Mins 50 Mins	Same
4	C 538 C 539 CY 539 A 126 ) CY 539-A)	4:25 AM 9:35 AM 10:25 AM 7:50 PM	C 538 C 539) CY 539) A 126 ) CY 539-A)	4:40 AM 10:25 AM 7:35 PM	15 Mins 15 Mins	15 Mins 50 Mins	Same
5	C 540 C 541 CY 541 C 542 A 127) CY 542)	8:55 AM 9:25 AM 10:40 AM 11:05 AM 10:15 PM	C 540 C 541) CY 541) C 542 A 127) CY 542)	6:25 AM 9:50 AM 10:20 AM 10:15 PM	2 Hrs 30 Mins 50 Mins 45 Mins	25 Mins	Same Same
6	C 543) Part C 544) Part C 544) C 545) CY 545) A 128 ) CY 545-A)	7:40 AM 9:25 AM 10:50 AM 11:20 PM	C 543 C 544 C 545) CY 545) A 128 ) CY 545-A)	3:55 AM 6:50 AM (6:50 AM) 9:15 AM 11:05 PM	3 Hrs 45 Mins 50 Mins 2 Hrs 35 Mins 10 Mins 1 Hr 35 Mins 15 Mins 15 Mins		
7	C 546 C 547 C 548 CY 548 A 129 ) CY 548-A)	7:10 AM 7:30 AM 9:55 AM 11:15 AM 10:25 PM	C 546 C 547 C 548) CY 548) A 129 ) CY 548-A)	7:20 AM 7:45 AM 9:40 AM 10:45 PM	15 Mins 1 Hr 35 Mins	10 Mins 15 Mins 20 Mins 20 Mins	
8	C 549) C 550) CY 550 C 551	10:55 AM 12:25 PM 1:45 PM	C 549 C 550) CY 550) C 551	4:35 AM 10:35 AM 1:10 PM	6 Hrs 20 Mins 20 Mins 1 Hr 50 Mins 35 Mins		Same Same
9	CY 551 C 552 C 553 CY 553 C 554	5:00 AM 5:10 AM 9:45 AM 10:20 AM 11:40 AM	CY 551 C 552 C 553) CY 553) C 554	5:10 AM 10:15 AM 11:00 AM	5 Mins 40 Mins	30 Mins	
10	C 555 C 556 C 557	5:15 AM 9:05 AM 9:25 AM	C 555) C 556) C 557	9:15 AM 10:40 AM		4 Hrs 00 Mins 10 Mins 1 Hr 15 Mins	
11	CY 557) Part C 558) Part C 558) C 559) CY 559	5:55 AM 7:50 AM 9:00 AM	CY 557 C 558 C 559) CY 559)	3:50 AM 4:30 AM 9:15 AM	2 Hrs 05 Mins 1 Hr 25 Mins 3 Hrs 20 Mins	1 Hr 25 Mins 15 Mins	
12	Part CY 559-A) C 560 ) Part CY 559-A) C 561 ) C 562 ) CY 562	5:15 AM 8:50 AM 10:30 AM 11:00 AM	CY 559-A C 560 ) C 561 ) C 562 ) CY 562)	3:10 AM 5:15 AM (3:10 AM) 8:50 AM 11:08 AM	2 Hrs 05 Mins 5 Hrs 40 Mins	30 Mins	Same Same Same
13	Part CY 562-A) C 563 ) Part CY 562-A) C 564 ) CY 565 ) C 565	5:50 AM 7:50 AM 12:50 PM 1:30 PM	Part CY 562-A) C 563 ) Part CY 562-A) C 564 ) CY 565 ) C 565)	5:55 AM 6:50 AM 1:45 PM	1 Hr 00 Mins 1 Hr 00 Mins	55 Mins 15 Mins	
14	Part CY 565-A) C 566 ) Part CY 565-A) C 567 ) CY 567 ) C 568	6:20 AM 7:15 AM 9:15 AM 11:15 AM	CY 565-A) C 566 ) C 567 ) CY 567 ) C 568	7:05 AM (7:05 AM) 7:45 AM 11:35 AM	10 Mins 1 Hr 30 Mins	45 Mins 45 Mins 30 Mins 20 Mins	



5	A 126 ) GT 539-A ) C 540 C 541 GT 541 C 542 A 127 ) GT 542 )	7:50 PM 8:55 AM 9:25 AM 10:40 AM 11:05 AM 10:15 PM	A 126 ) GT 539-A ) C 540 C 541 ) GT 541 ) C 542 A 127 ) GT 542 )	7:35 PM 6:25 AM 9:50 AM 10:20 AM 10:15 PM	15 Mine 15 Mine 2 Hrs 30 Mine 50 Mine 45 Mine	25 Mine 17	Same Same
6	C 543 ) Part C 544 ) Part C 544 ) C 545 ) GT 545 ) A 128 ) GT 545-A )	7:40 AM 9:25 AM 10:50 AM 11:20 PM	C 543 C 544 C 545 ) GT 545 ) A 128 ) GT 545-A )	3:55 AM 6:54 AM (6:50 AM) 9:15 AM 11:05 PM	3 Hrs 45 Mine 50 Mine 2 Hrs 35 Mine 10 Mine 1 Hr 35 Mine 15 Mine 15 Mine		
7	C 546 C 547 C 548 GT 548 A 129 ) GT 548-A )	7:10 AM 7:30 AM 9:55 AM 11:15 AM 10:25 PM	C 546 C 547 C 548 ) GT 548 ) A 129 ) GT 548-A )	7:20 AM 7:45 AM 9:40 AM 10:45 PM	15 Mine 1 Hr 35 Mine	10 Mine 15 Mine 20 Mine 20 Mine	
8	C 549 ) C 550 ) GT 550 C 551	10:55 AM 12:25 PM 1:45 PM	C 549 C 550 ) GT 550 ) C 551	4:35 AM 10:35 AM 1:10 PM	6 Hrs 20 Mine 20 Mine 1 Hr 50 Mine 35 Mine		
9	GT 551 C 552 C 553 GT 553 C 554	5:00 AM 5:10 AM 9:45 AM 10:20 AM 11:40 AM	GT 551 C 552 C 553 ) GT 553 ) C 554	5:00 AM 5:10 AM 10:15 AM 11:00 AM	5 Mine 40 Mine	30 Mine	Same Same
10	C 555 C 556 C 557	5:15 AM 9:05 AM 9:25 AM	C 555 ) C 556 ) C 557	9:15 AM 10:40 AM	4 Hrs 00 Mine 10 Mine 1 Hr 15 Mine		
11	GT 557 ) Part C 558 ) Part C 558 ) C 559 ) GT 559	5:55 AM 7:50 AM 9:00 AM	GT 557 ) C 558 ) C 559 ) GT 559 )	3:50 AM 4:30 AM 9:15 AM	2 Hrs 05 Mine 1 Hr 25 Mine 3 Hrs 20 Mine	1 Hr 25 Mine 15 Mine	
12	Part GT 559-A ) C 560 ) Part GT 559-A ) C 561 ) C 562 GT 562	5:15 AM 8:50 AM 10:30 AM 11:00 AM	GT 559-A ) C 560 ) C 561 ) C 562 ) GT 562 )	3:10 AM 5:15 AM (3:10 AM) 8:50 AM 11:00 AM	2 Hrs 05 Mine 5 Hrs 40 Mine	30 Mine	Same Same Same
13	Part GT 562-A ) C 563 ) Part GT 562-A ) C 564 ) GT 565 C 565	5:50 AM 7:50 AM 12:50 PM 1:30 PM	Part GT 562-A ) C 563 ) Part GT 562-A ) C 564 ) GT 565 ) C 565 )	5:55 AM 6:50 AM 1:45 PM	1 Hr 00 Mine 1 Hr 00 Mine	5 Mine 5 Mine 55 Mine 15 Mine	
14	Part GT 565-A ) C 566 ) Part GT 565-A ) C 567 ) GT 567 C 568	6:20 AM 7:15 AM 9:15 AM 11:15 AM	GT 565-A ) C 566 ) C 567 ) GT 567 ) C 568	7:05 AM (7:05 AM) 7:45 AM 11:35 AM	10 Mine 1 Hr 30 Mine	45 Mine 45 Mine 30 Mine 20 Mine	
15	GT 568 ) C 569 ) C 570 C 571 GT 571	8:50 AM 9:00 AM 9:30 AM 11:25 AM	GT 568 ) C 569 ) C 570 C 571 ) GT 571 )	6:40 AM 9:00 AM 11:20 AM	2 Hrs 10 Mine 2 Hrs 10 Mine 5 Mine	1 Hr 50 Mine	Same Same
16	SEE 4-13 ) C 572 ) C 573 SEE 3-14	5:00 AM 7:30 AM 1:30 PM	SEE 4-13 ) C 572 ) C 573 ) SEE 3-14 )	5:00 AM 10:55 AM	2 Hrs 35 Mine	3 Hrs 25 Mine	Same Same

AUGUST 1938

DATE (a)	PERISHABLE BLOCK OR MAKEUP IDENTIFICATION (b)	ACTUAL ARRIVAL EL PASO (c)	PERISHABLE BLOCK OR MAKEUP IDENTIFICATION (d)	REDISPATCHED ARRIV-EL PASO (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	OPERATIONS SAME AS ACTUAL (h)
17	C 574 CY 573) C 575) CY 575	5:20 AM 1:10 PM 2:20 PM	C 574 CY 573) C 575) CY 575)	5:20 AM 1:40 PM		30 Mine 30 Mine	Same
18	CY 575-A C 576 C 577	12:20 AM 5:30 AM 12:05 PM	CY 575-A C 576 C 577	12:20 AM 4:05 AM 1:00 PM	1 Hr 25 Mine	55 Mine	Same
19	CY 577 C 578 C 579 C 580 CY 580	4:05 AM 5:10 AM 10:10 AM 10:25 AM 11:15 AM	CY 577) C 578) C 579 C 580) CY 580)	7:30 AM 9:15 AM 11:05 AM	55 Mine 10 Mine	3 Hrs 25 Mine 2 Hrs 20 Mine 40 Mine	
20	C 581 CY 580-A C 582 C 583 CY 583	6:25 AM 9:15 AM 10:50 AM 12:15 PM 12:35 PM	C 581 CY 580-A C 582 C 583) CY 583)	5:30 AM 10:15 AM 10:30 AM 12:35 PM	55 Mine 20 Mine	1 Hr 00 Mine 20 Mine	Same
21	Part CY 583-A) C 584 Part CY 583-A) C 585 C 586 CY 586	6:45 AM 10:50 AM 11:00 AM 11:05 AM	CY 583-A C 584 C 585 C 586) CY 586)	2:25 AM 4:55 AM (2:15 AM) 9:20 AM 9:45 AM	4 Hrs 30 Mine 1 Hr 50 Mine 8 Hrs 35 Mine 1 Hr 30 Mine 1 Hr 15 Mine 1 Hr 20 Mine		
22	CY 586-A C 587 C 588 C 589 C 590 CY 590)	6:35 AM 6:45 AM 10:30 AM 11:15 AM 12:15 PM	CY 586-A C 587 C 588) C 589) C 590 CY 590)	6:20 AM 6:45 AM 11:30 AM 1:05 PM	15 Mine	1 Hr 00 Mine 15 Mine 50 Mine	Same
23	C 591) C 592 CY 592 C 593	5:05 AM 6:25 AM 8:50 AM 11:10 AM	C 591) C 592) CY 592) C 593	4:15 AM 7:50 AM 11:10 AM	50 Mine 50 Mine 1 Hr 00 Mine	1 Hr 25 Mine	Same
24	C 594 C 595 C 596	5:30 AM 8:09 AM 8:50 AM	C 594 C 595) C 596)	5:00 AM 9:00 AM	30 Mine	51 Mine 10 Mine	
25	C 597 CY 596 C 598 CY 598	4:15 PM 5:15 AM 8:05 AM 8:25 AM	C 597 CY 596 C 598) CY 598)	6:05 AM 5:15 AM 8:45 AM	1 Hr 50 Mine 40 Mine 20 Mine	5 Mine	Same
26	C 599 Part CY 598-A) C 600 C 601 Part CY 598-A) C 602	6:45 AM 11:45 AM 12:30 PM 1:40 PM	C 599 CY 598-A) C 600) C 601) C 602	6:50 AM 11:40 AM (6:50 AM) 1:55 PM	4 Hrs 55 Mine 5 Mine 50 Mine 6 Hrs 50 Mine	15 Mine	
27	CY 602) C 603) C 604 C 605 CY 605 C 606	6:55 AM 9:05 AM 10:40 AM 11:40 AM 1:20 PM	CY 602 C 603 C 604) C 605) CY 605) C 606)	4:40 AM 7:20 AM 11:00 AM 1:00 PM	2 Hrs 15 Mine 20 Mine	25 Mine 1 Hr 55 Mine 20 Mine 1 Hr 20 Mine	
28	CY 606) C 607 C 608 C 609 CY 609	6:10 AM 6:35 AM 10:30 AM 10:50 AM	CY 606) C 607) C 608 C 609) CY 609)	5:55 AM 6:40 AM 11:25 AM	15 Mine 15 Mine	5 Mine 55 Mine 35 Mine	
29	CY 609-A) C 610 C 611 CY 611 C 612	5:45 AM 7:30 AM 10:40 AM 11:10 AM	CY 609-A) C 610 C 611) CY 611) C 612	5:30 AM 9:40 AM 11:20 AM	15 Mine 15 Mine 1 Hr 00 Mine	10 Mine 10 Mine	
30	C 613 CY 612) C 614	6:35 AM 10:50 AM	C 613 CY 612 C 614)	6:25 AM 8:20 AM	10 Mine 2 Hrs 30 Mine 1 Hr 05 Mine		



	CT 580-A C 580 C 583 CT 583	9:15 AM 10:50 AM 12:15 PM 12:35 PM	CT 580-A C 583 C 583 CT 583	10:15 AM 10:30 AM 12:35 PM	20 Mine	1 Hr 00 Mine 20 Mine	Same
21	Part CT 583-A C 584 Part CT 583-A C 585 C 586 CT 586	6:45 AM 10:50 AM 11:00 AM 11:05 AM	CT 583-A C 584 C 585 C 586 CT 586	8:15 AM 4:55 AM (2:15 AM) 3:20 AM 9:45 AM	4 Hrs 30 Mine 1 Hr 50 Mine 8 Hrs 35 Mine 1 Hr 30 Mine 1 Hr 15 Mine 1 Hr 20 Mine		
22	CT 586-A C 587 C 588 C 589 C 590	6:35 AM 6:45 AM 10:30 AM 11:15 AM 12:15 PM	CT 586-A C 587 C 588 C 589 C 590	6:20 AM 6:45 AM 11:30 AM 1:05 PM	15 Mine	1 Hr 00 Mine 15 Mine 50 Mine	Same
23	CT 590 C 591 C 592 CT 592 C 593	5:05 AM 6:25 AM 8:50 AM 11:10 AM	CT 590 C 591 C 592 CT 592 C 593	4:15 AM 7:50 AM 11:10 AM	50 Mine 50 Mine 1 Hr 00 Mine	1 Hr 25 Mine	Same
24	C 594 C 595 C 596	5:30 AM 8:09 AM 8:50 AM	C 594 C 595 C 596	5:00 AM 9:00 AM	30 Mine	51 Mine 10 Mine	
25	C 597 CT 598 C 598 CT 598	4:15 AM 5:15 AM 8:05 AM 8:25 AM	C 597 CT 598 C 598 CT 598	6:05 AM 5:15 AM 8:45 AM		1 Hr 50 Mine 40 Mine 20 Mine	Same
26	C 599 Part CT 598-A C 600 C 601 Part CT 598-A C 602	6:45 AM 11:45 AM 12:30 PM 1:40 PM	C 599 CT 598-A C 600 C 601 C 602	6:50 AM 11:40 AM (6:50 AM) 1:55 PM	4 Hrs 55 Mine 5 Mine 50 Mine 6 Hrs 50 Mine	5 Mine 15 Mine	
27	CT 602 C 603 C 604 C 605 CT 605 C 606	6:55 AM 9:05 AM 10:40 AM 11:40 AM 1:20 PM	CT 602 C 603 C 604 C 605 CT 605 C 606	4:40 AM 7:20 AM 11:00 AM 1:00 PM	2 Hrs 15 Mine	25 Mine 1 Hr 55 Mine 20 Mine 1 Hr 20 Mine	
28	CT 606 C 607 C 608 C 609 CT 609	6:10 AM 6:35 AM 10:30 AM 10:50 AM	CT 606 C 607 C 608 C 609 CT 609	5:55 AM 6:40 AM 11:25 AM	15 Mine 15 Mine	5 Mine 55 Mine 35 Mine	
29	CT 609-A C 610 C 611 CT 611 C 612	5:45 AM 9:30 AM 10:40 AM 11:10 AM	CT 609-A C 610 C 611 CT 611 C 612	5:30 AM 9:40 AM 11:20 AM	15 Mine 15 Mine 1 Hr 00 Mine	10 Mine 10 Mine	
30	C 613 CT 612 C 614 C 615	6:35 AM 10:50 AM 11:00 AM	C 613 CT 612 C 614 C 615	4:25 AM 8:20 AM 9:45 AM	10 Mine 2 Hrs 30 Mine 1 Hr 05 Mine 1 Hr 15 Mine		
31	C 616 C 617 CT 617 CT 617-A C 618	1:40 AM 8:50 AM 12:10 PM 6:05 AM	C 616 C 617 CT 617 CT 617-A C 618	12:40 AM 8:40 AM 10:20 PM 5:15 AM	1 Hr 00 Mine 10 Mine Hrs 30 Mine 7 Hrs 45 Mine 30 Mine		

**Defendant's Exhibit No. 228 (Witness Sines)**  
**Jan. 30, 1941**

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

ARRIVAL TIME AT YUMA, ARIZONA  
OF "SSW" AND "GBW" WESTWARD MANIFEST TRAINS  
ACTUAL OPERATION COMPARED WITH REDISPATCHED  
OPERATION, WITH NO RESTRICTION AND USING AC  
POWER AND LONG SIDINGS.

MONTHS OF JUNE AND AUGUST, 1938

SUMMARY

<u>JUNE, 1938</u>	
(1) NUMBER OF TRAINS ARRIVING YUMA - ACTUAL, . . . . .	58
(2) NUMBER OF TRAINS ARRIVING YUMA - REDISPATCHED, . . . . .	57
(3) NUMBER OF BLOCKS AND MANIFEST SECTIONS INVOLVED, . . . . .	76
(4) NUMBER OF REDISPATCHED BLOCKS ARRIVING YUMA -	
(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	34
(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	26
(c) LATER THAN ACTUAL BLOCKS, . . . . .	16
(5) TOTAL TIME -	
(a) IN ADVANCE OF ACTUAL, . . . . .	11 HOURS 5 MINUTES
(b) LATER THAN ACTUAL, . . . . .	5 HOURS 15 MINUTES
(6) AVERAGE TIME OF 26 BLOCKS IN ADVANCE OF ACTUAL, . . . . .	26 MINUTES
(7) AVERAGE TIME OF 16 BLOCKS LATER THAN ACTUAL, . . . . .	20 MINUTES
<u>AUGUST, 1938</u>	
(1) NUMBER OF TRAINS ARRIVING YUMA - ACTUAL, . . . . .	64
(2) NUMBER OF TRAINS ARRIVING YUMA - REDISPATCHED, . . . . .	63
(3) NUMBER OF BLOCKS AND MANIFEST SECTIONS INVOLVED, . . . . .	75
(4) NUMBER OF REDISPATCHED BLOCKS ARRIVING YUMA -	
(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	36
(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	24
(c) LATER THAN ACTUAL BLOCKS, . . . . .	15
(5) TOTAL TIME -	
(a) IN ADVANCE OF ACTUAL, . . . . .	11 HOURS 10 MINUTES
(b) LATER THAN ACTUAL, . . . . .	6 HOURS
(6) AVERAGE TIME OF 24 BLOCKS IN ADVANCE OF ACTUAL, . . . . .	28 MINUTES
(7) AVERAGE TIME OF 15 BLOCKS LATER THAN ACTUAL, . . . . .	24 MINUTES

SSW = SUNSET WEST MANIFEST

GBW = GOLD BALL WEST MANIFEST



JUNE 1938

DATE (a)	MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL YUMA (c)	MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL YUMA (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	REDISPATCHED SAME AS ACTUAL (h)
2	SSW 1 GSW 31	8:05 AM 8:30 AM	SSW 1 GSW 31	8:05 AM 8:50 AM			Same
3	SSW 2 GSW 1	6:25 AM 9:10 AM	SSW 2 GSW 1	6:30 AM 8:45 AM	25 mins.	10 mins.	
4	SSW 3 GSW 2	6:00 AM 7:30 AM	SSW 3 GSW 2	6:00 AM 8:00 AM		30 mins.	Same
5	SSW 4) GSW 3)	7:50 AM	(SSW 4) (GSW 3)	7:25 AM	25 mins. 25 mins.		
6	SSW 5 GSW 4	6:30 AM 10:10 AM	SSW 5 GSW 4	6:55 AM 10:20 AM		25 mins. 10 mins.	
7	SSW 6 GSW 5	7:20 AM 8:50 AM	SSW 6 GSW 5	7:35 AM 8:50 AM		15 mins.	Same
8	SSW 7 GSW 6	8:50 AM 8:55 AM	SSW 7 GSW 6	8:00 AM 8:40 AM	50 mins. 15 mins.		
9	SSW 1-8) GSW 7 ) SSW 2-8	7:20 AM 8:05 AM	(SSW 1-8) (GSW 7 ) SSW 2-8	7:20 AM 8:05 AM			Same Same Same
10	SSW 1-9) GSW 1-8 )  SSW 2-9) GSW 2-8 )	7:25 AM  11:05 AM	(SSW 1-9) (GSW 1-8 )  (SSW 2-9) (GSW 2-8 )	7:25 AM  10:30 AM	  35 mins. 35 mins.		Same Same Same
11	SSW 1-10) GSW 9 ) SSW 2-10	7:20 AM 10:25 AM	(SSW 1-10) (GSW 9 ) SSW 2-10	7:20 AM 10:10 AM	5 mins.		Same Same
12	SSW 1-11) GSW 10 ) SSW 2-11	7:25 AM 10:05 AM	(SSW 1-11) (GSW 10 ) SSW 2-11	7:00 AM 9:50 AM	25 mins. 25 mins. 15 mins.		
13	SSW 1-12) GSW 11 ) SSW 2-12	6:35 AM 9:15 AM	(SSW 1-12) (GSW 11 ) SSW 2-12	6:40 AM 9:15 AM		5 mins. 5 mins.	Same
14	SSW 1-13) GSW 12 ) SSW 2-13 SSW 3-13	6:45 AM 7:50 AM 11:25 AM	(SSW 1-13) (GSW 12 ) (SSW 2-13) SSW 3-13	7:50 AM (7:50 AM) 11:25 AM		1 hr. 5 mins. 1 hr. 5 mins.	Same Same Same
15	SSW 14 GSW 13	5:55 AM 7:30 AM	SSW 14 GSW 13	5:55 AM 7:30 AM			Same Same Same
16	SSW 1-15) GSW 14 ) SSW 2-15	5:45 AM 7:25 AM	(SSW 1-15) (GSW 14 ) SSW 2-15	5:45 AM 7:40 AM		15 mins.	Same Same
17	SSW 1-16) SSW 2-16) GSW 15 )	6:00 AM 7:30 AM	SSW 1-16 (SSW 2-16) (GSW 15 )	6:00 AM 7:30 AM			Same Same Same
18	SSW 1-2-17) GSW 16 ) SSW 3-17	7:00 AM 7:10 AM	(SSW 1-2-17) (GSW 16 ) SSW 3-17	6:50 AM 7:00 AM	10 mins. 10 mins. 10 mins.		
19	SSW 1-18) GSW 17 ) SSW 2-18	7:45 AM 9:00 AM	(SSW 1-18) (GSW 17 ) SSW 2-18	7:45 AM 8:35 AM	25 mins.		Same Same
20	SSW 19 GSW 18	6:40 AM 10:15 AM	SSW 19 GSW 18	6:55 AM 10:25 AM		15 mins. 10 mins.	
21	SSW 20 GSW 19	6:25 AM 7:30 AM	SSW 20 GSW 19	6:25 AM 7:30 AM			Same Same
22	SSW 1-21)		(SSW 1-21)		15 mins.		

6	GDW 3) SSW 5 GDW 4	7:50 AM 6:30 AM 10:10 AM	(GDW 3) SSW 5 GDW 4	7:25 AM 6:55 AM 10:20 AM	25 mins. 25 mins. 10 mins.		
7	SSW 4 GDW 5	7:20 AM 8:50 AM	SSW 6 GDW 5	7:35 AM 8:50 AM	15 mins.		Same
8	SSW 7 GDW 6	8:50 AM 8:55 AM	SSW 7 GDW 6	8:00 AM 8:40 AM	50 mins. 15 mins.		
9	SSW 1-8) GDW 7 ) SSW 2-8	7:20 AM 8:05 AM	(SSW 1-8) (GDW 7 ) SSW 2-8	7:20 AM 8:05 AM			Same Same Same
10	SSW 1-9) GDW 1-8)	7:25 AM	(SSW 1-9) (GDW 1-8)	7:25 AM			Same Same
	SSW 2-9) GDW 2-8)	11:05 AM	(SSW 2-9) (GDW 2-8)	10:30 AM	35 mins. 35 mins.		
11	SSW 1-10) GDW 9 ) SSW 2-10	7:20 AM 10:15 AM	(SSW 1-10) (GDW 9 ) SSW 2-10	7:20 AM 10:10 AM	5 mins.		Same Same
12	SSW 1-11) GDW 10 ) SSW 2-11	7:25 AM 10:05 AM	(SSW 1-11) (GDW 10 ) SSW 2-11	7:00 AM 9:50 AM	25 mins. 25 mins. 15 mins.		
13	SSW 1-12) GDW 11 ) SSW 2-12	6:35 AM 9:15 AM	(SSW 1-12) (GDW 11 ) SSW 2-12	6:40 AM 9:15 AM	5 mins. 5 mins.		Same
14	SSW 1-13) GDW 12 ) SSW 2-13 SSW 3-13	6:45 AM 7:50 AM 11:25 AM	(SSW 1-13) (GDW 12 ) (SSW 2-13) SSW 3-13	7:50 AM (7:50 AM) 11:25 AM	1 hr. 5 mins. 1 hr. 5 mins.		Same Same
15	SSW 14 GDW 13	5:55 AM 7:30 AM	SSW 14 GDW 13	5:55 AM 7:30 AM			Same Same
16	SSW 1-15) GDW 14 ) SSW 2-15	5:45 AM 7:45 AM	(SSW 1-15) (GDW 14 ) SSW 2-15	5:45 AM 7:40 AM	15 mins.		Same Same
17	SSW 1-16 SSW 2-16) GDW 15 )	6:00 AM 7:30 AM	SSW 1-16 (SSW 2-16) (GDW 15 )	6:00 AM 7:30 AM			Same Same Same
18	SSW 1-2-17) GDW 16 ) SSW 3-17	7:00 AM 7:10 AM	(SSW 1-2-17) (GDW 16 ) SSW 3-17	6:50 AM 7:00 AM	10 mins. 10 mins. 10 mins.		
19	SSW 1-18) GDW 17 ) SSW 2-18	7:45 AM 9:00 AM	(SSW 1-18) (GDW 17 ) SSW 2-18	7:45 AM 8:35 AM	25 mins.		Same Same
20	SSW 19 GDW 18	6:40 AM 10:15 AM	SSW 19 GDW 18	6:55 AM 10:25 AM	15 mins. 10 mins.		
21	SSW 20 GDW 19	6:25 AM 7:30 AM	SSW 20 GDW 19	6:25 AM 7:30 AM			Same Same
22	SSW 1-21) GDW 20 ) SSW 2-21	6:00 AM 6:30 AM	(SSW 1-21) (GDW 20 ) SSW 2-21	5:45 AM 6:25 AM	15 mins. 15 mins. 5 mins.		
23	SSW 1-2-22) GDW 21 ) SSW 3-22	5:10 AM 7:30 AM	(SSW 1-2-22) (GDW 21 ) SSW 3-22	5:10 AM 7:30 AM			Same Same Same
24	SSW 1-23 SSW 2-23) GDW 22 )	3:15 AM 10:05 AM	SSW 1-23 (SSW 2-23) (GDW 22 )	3:15 AM 10:10 AM	5 mins. 5 mins.		Same
25	SSW 24 GDW 23	9:10 AM 10:05 AM	SSW 24 GDW 23	8:40 AM 9:45 AM	30 mins. 20 mins.		



JUNE 1938

(Sheet 3 of 4 sheets)

DATE (a)	MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL TIME (c)	MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL TIME (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	REDISPATCHED SAME AS ACTUAL (h)
26	SDW 1-25 ) GOW 24 ) SDW 2-25	5:45 AM 9:25 AM	(SDW 1-25 ) (GOW 24 ) SDW 2-25	4:30 AM 9:25 AM	1 hr. 15 mins. 1 hr. 15 mins.		Same
27	SDW 1-26 ) GOW 25 ) SDW 2-26	6:40 AM 10:05 AM	(SDW 1-26 ) (GOW 25 ) SDW 2-26	6:30 AM 9:10 AM	10 mins. 10 mins. 55 mins.		
28	SDW 27 GOW 26	6:10 AM 9:00 AM	SDW 27 GOW 26	5:50 AM 9:00 AM	20 mins.		Same
29	SDW 28 GOW 27	8:40 AM 9:20 AM	SDW 28 GOW 27	8:55 AM 9:20 AM		15 mins.	Same
30	SDW 1-29 ) SDW 2-29 ) GOW 28 )	5:55 AM 7:50 AM	SDW 1-29 ) (SDW 2-29 ) (GOW 28 )	5:55 AM 7:50 AM			Same Same Same

AUGUST 1938

2	SDW 1-1 ) SDW 2-1 ) GOW 1-31 ) GOW 2-31	6:00 AM 6:25 AM 2:30 PM	SDW 1-1 ) (SDW 2-1 ) (GOW 1-31 ) GOW 2-31	6:00 AM 6:25 AM 2:50 PM		20 mins.	Same Same Same
3	SDW 2 GOW 1	5:55 AM 7:35 AM	SDW 2 GOW 1	5:55 AM 7:35 AM			Same Same
4	SDW 3 ) GOW 1-2 ) GOW 2-2	5:35 AM 7:30 AM	(SDW 3 ) (GOW 1-2 ) GOW 2-2	5:25 AM 7:20 AM	10 mins. 10 mins. 10 mins.		
5	SDW 4 ) GOW 1-3 ) GOW 2-3	7:05 AM 9:15 AM	(SDW 4 ) (GOW 1-3 ) GOW 2-3	6:55 AM 9:10 AM	10 mins. 10 mins.		Same
6	SDW 5 ) GOW 1-4 ) GOW 2-4	6:40 AM 6:55 AM	SDW 5 ) GOW 1-4 ) GOW 2-4	6:15 AM 6:35 AM	25 mins. 25 mins. 20 mins.		
7	SDW 6 GOW 5	3:35 AM 7:45 AM	SDW 6 GOW 5	3:35 AM 7:45 AM			Same Same
8	SDW 7 GOW 6	6:15 AM 7:25 AM	SDW 7 GOW 6	6:25 AM 7:25 AM		10 mins.	Same
9	SDW 8 GOW 7	3:15 AM 7:15 AM	SDW 8 GOW 7	3:15 AM 7:15 AM			Same Same
10	SDW 9 ) GOW 1-8 ) GOW 2-8	3:35 AM 6:20 AM	(SDW 9 ) (GOW 1-8 ) GOW 2-8	4:00 AM 6:20 AM		25 mins 25 mins	Same
11	SDW 10 ) GOW 1-9 ) GOW 2-9	6:00 AM 7:15 AM	(SDW 10 ) (GOW 1-9 ) GOW 2-9	6:00 AM 7:15 AM			Same Same Same
12	SDW 11 ) GOW 1-10 ) GOW 2-10	4:30 AM 6:20 AM	(SDW 11 ) (GOW 1-10 ) GOW 2-10	4:30 AM 6:20 AM			Same Same Same
13	SDW 12 GOW 11	6:25 AM 6:45 AM	SDW 12 GOW 11	5:55 AM 6:35 AM	30 mins. 10 mins.		
14	SDW 13 ) GOW 12 )	6:20 AM	(SDW 13 ) (GOW 12 )	6:10 AM	10 mins. 10 mins.		
15	SDW 14 GOW 13	6:35 AM 9:25 AM	SDW 14 GOW 13	6:05 AM 9:55 AM	30 mins.	30 mins.	

29	SSW 26 GBW 27	8:40 AM 9:20 AM	SSW 28 GBW 27	8:55 AM 9:20 AM	15 mins.	Same
30	SSW 1-29 SSW 2-29) GBW 28 )	5:55 AM 7:50 AM	SSW 1-29 (SSW 2-29) (GBW 28 )	5:55 AM 7:50 AM		Same Same Same
AUGUST 1938						
2	SSW 1-1 SSW 2-1 ) GBW 1-31) GBW 2-31	6:00 AM 6:25 AM 2:30 PM	SSW 1-1 (SSW 2-1 ) (GBW 1-31) GBW 2-31	6:00 AM 6:25 AM 2:30 PM	20 mins.	Same Same Same
3	SSW 2 GBW 1	5:55 AM 7:35 AM	SSW 2 GBW 1	5:55 AM 7:35 AM		Same Same
4	SSW 3 ) GBW 1-2) GBW 2-2	5:35 AM 7:30 AM	(SSW 3 ) (GBW 1-2) GBW 2-2	5:25 AM 7:20 AM	10 mins. 10 mins. 10 mins.	
5	SSW 4 ) GBW 1-3) GBW 2-3	7:05 AM 9:10 AM	(SSW 4 ) (GBW 1-3) GBW 2-3	6:55 AM 9:10 AM	10 mins. 10 mins.	Same
6	SSW 5 ) GBW 1-4) GBW 2-4	6:40 AM 6:55 AM	SSW 5 ) GBW 1-4) GBW 2-4	6:15 AM 6:35 AM	25 mins. 25 mins. 20 mins.	
7	SSW 6 GBW 5	3:35 AM 7:45 AM	SSW 6 GBW 5	3:35 AM 7:45 AM		Same Same
8	SSW 7 GBW 6	6:35 AM 7:25 AM	SSW 7 GBW 6	6:25 AM 7:25 AM	10 mins.	Same
9	SSW 8 GBW 7	3:15 AM 7:15 AM	SSW 8 GBW 7	3:15 AM 7:15 AM		Same Same
10	SSW 9 ) GBW 1-8) GBW 2-8	3:35 AM 6:20 AM	(SSW 9 ) (GBW 1-8) GBW 2-8	4:00 AM 6:20 AM	25 mins 25 mins	Same
11	SSW 10 ) GBW 1-9) GBW 2-9	6:00 AM 7:15 AM	(SSW 10 ) (GBW 1-9) GBW 2-9	6:00 AM 7:15 AM		Same Same Same
12	SSW 11 ) GBW 1-10) GBW 2-10	4:30 AM 6:20 AM	(SSW 11 ) (GBW 1-10) GBW 2-10	4:30 AM 6:20 AM		Same Same Same
13	SSW 12 GBW 11	6:25 AM 6:45 AM	SSW 12 GBW 11	5:55 AM 6:35 AM	30 mins. 10 mins.	
14	SSW 13) GBW 12)	6:20 AM	(SSW 13) (GBW 12)	6:10 AM	10 mins. 10 mins.	
15	SSW 14 GBW 13	6:35 AM 9:25 AM	SSW 14 GBW 13	6:05 AM 9:55 AM	30 mins.	30 mins.
16	SSW 15 GBW 14	2:30 AM 5:55 AM	SSW 15 GBW 14	2:30 AM 5:55 AM		Same Same
17	SSW 16 ) GBW 1-15) GBW 2-15	6:35 AM 8:15 AM	(SSW 16 ) (GBW 1-15) GBW 2-15	5:50 AM 6:05 AM	45 mins. 45 mins. 10 mins.	
18	SSW 17 GBW 16	6:00 AM 7:15 AM	SSW 17 GBW 16	6:00 AM 6:15 AM	1 hr.	Same
19	SSW 18 GBW 17	6:10 AM 6:45 AM	SSW 18 GBW 17	4:30 AM 7:00 AM	1 hr. 40 mins 15 mins.	



(Sheet 4 of 4 sheets)

AUGUST 1938

DATE (a)	MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL TIME (c)	MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL TIME (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	REDISPATCHED SAME AS ACTUAL (h)
20	SSW 19 GBW 18	6:30 AM 8:40 AM	SSW 19 GBW 18	6:25 AM 8:40 AM	5 mins.		Same
21	SSW 20 ) GBW 1-19 ) GBW 2-19 GBW 3-19	6:30 AM 12:50 PM 2:55 PM	(SSW 20 ) (GBW 1-19 ) GBW 2-19 GBW 3-19	7:15 AM 1:05 PM 3:45 PM		45 mins. 45 mins. 15 mins. 50 mins.	
22	SSW 21 GBW 1-20 GBW 2-20	6:00 AM 9:25 AM 2:45 PM	SSW 21 GBW 1-20 GBW 2-20	6:00 AM 9:25 AM 2:45 PM			Same Same Same
23	SSW 22 GBW 1-21 GBW 2-21	2:10 AM 7:30 AM 6:05 PM	SSW 22 GBW 1-21 GBW 2-21	2:10 AM 6:35 AM 6:10 PM	55 mins.	5 mins.	Same
24	SSW 23 GBW 22	2:35 AM 8:20 AM	SSW 23 GBW 22	2:35 AM 7:50 AM	30 mins.		Same
25	SSW 24 ) GBW 1-23 ) GBW 2-23	6:00 AM 9:30 AM	(SSW 24 ) (GBW 1-23 ) GBW 2-23	6:00 AM 9:30 AM			Same Same Same
26	SSW 25 GBW 24	6:20 AM 7:50 AM	SSW 25 GBW 24	6:20 AM 7:00 AM	50 mins.		Same
27	SSW 26 GBW 25	6:30 AM 8:10 AM	SSW 26 GBW 25	6:30 AM 8:50 AM		40 mins.	Same
28	SSW 27 GBW 26	7:00 AM 7:15 AM	SSW 27 GBW 26	7:00 AM 7:15 AM			Same Same
29	SSW 28 GBW 27	5:50 AM 6:50 AM	SSW 28 GBW 27	5:50 AM 7:05 AM		15 mins.	Same
30	SSW 29 GBW 1-28 GBW 2-28	1:50 AM 5:50 AM 6:50 AM	SSW 29 (GBW 1-28) (GBW 2-28)	1:40 AM 6:00 AM	10 mins. 50 mins.	10 mins.	
31	SSW 30 GBW 29	5:55 AM 7:30 AM	SSW 30 GBW 29	5:55 AM 7:40 AM		10 mins.	Same

5703

efendant's Exhibit No. 229 (Witness Sines)  
Jan. 30, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

RECEIPT STATION WAGE DATA

TUWA, ARIZONA TO EL PASO, TEXAS  
FOR PERIOD JUNE AND AUGUST, 1938

	NO. OF TRAINS (a)	TRAIN MILES (b)	TRAINMEN'S WAGES			LOCO- MOTIVE MILES (f)	ENGINEER'S WAGES			TOTAL WAGES		
			BASIC (c)	VARIABLE (d)	TOTAL (e)		BASIC (g)	VARIABLE (h)	TOTAL (i)	BASIC (j)	VARIABLE (k)	TOTAL (l)
<b>NORTH LINE</b>												
(1) TUMA - GILA												
ACTUAL	772	94,833	\$84,937.86	\$1,373.95	\$86,311.81	99,096	\$15,646.75	\$1,337.29	\$16,984.04	\$40,964.03	\$2,711.24	\$43,675.27
RECEIPTED	554	68,165	17,629.99	1,040.95	18,670.94	69,843	12,234.19	1,105.34	13,339.53	29,864.18	2,146.29	32,010.47
SAVING FOR PERIOD	217	26,668	7,307.87	733.00	8,040.87	29,253	3,392.56	231.95	3,624.51	10,699.85	564.95	11,264.80
(2) GILA - TUCSON												
ACTUAL	767	98,176	\$25,960.52	\$2,611.53	\$28,572.05	114,694	\$19,796.59	\$1,891.37	\$21,687.96	\$45,757.21	\$4,502.90	\$50,260.11
RECEIPTED	550	70,400	18,226.85	1,926.40	20,153.25	82,146	15,441.41	1,544.86	16,986.27	33,668.26	3,471.26	37,139.52
SAVING FOR PERIOD	217	27,776	7,733.67	685.13	8,418.80	32,548	4,355.18	346.51	4,701.69	12,088.95	1,031.64	13,120.59
(3) TUCSON - LOMBARD												
ACTUAL	796	123,010	\$35,778.99	\$1,673.95	\$37,452.94	183,874	\$30,968.70	\$1,526.76	\$32,495.46	\$66,741.69	\$3,200.71	\$69,942.40
RECEIPTED	521	85,079	24,320.35	1,205.53	25,525.88	124,497	23,309.26	1,205.55	24,514.81	47,629.61	2,411.08	50,040.69
SAVING FOR PERIOD	275	37,931	11,458.64	468.42	11,927.06	59,377	7,653.44	321.21	7,974.65	19,112.08	789.63	19,901.71
(4) LOMBARD-EL PASO (Three Trains Only)												
ACTUAL	674	100,084	\$33,541.33	\$3,403.28	\$36,944.61	100,647	\$16,315.69	\$2,247.41	\$18,563.10	\$39,857.02	\$5,850.69	\$45,707.71
RECEIPTED	521	77,339	20,861.26	3,238.64	24,099.90	79,083	14,313.43	1,908.61	16,222.04	35,174.59	5,227.25	40,401.84
SAVING FOR PERIOD	153	22,745	2,680.07	364.64	3,044.71	21,564	2,002.26	258.80	2,261.06	4,682.43	623.44	5,305.87
(5) EL PASO - STRAUS												
ACTUAL	4	68	27.14	4.51	31.65	68	15.99	4.16	20.15	43.13	8.67	51.80
RECEIPTED	56	952	379.84	47.46	427.30	952	223.84	28.00	251.84	603.68	75.45	679.14
INCREASE FOR PERIOD	52	884	352.70	42.95	395.65	884	207.85	23.84	231.69	560.55	66.79	627.34
(6) TOTAL - NORTH LINE												
ACTUAL	2,972	416,171	\$110,245.36	\$9,267.22	\$119,512.58	498,139	\$82,717.72	\$7,006.99	\$89,724.71	\$192,963.08	\$16,274.22	\$209,237.29
RECEIPTED	2,308	302,931	\$71,418.19	\$7,458.98	\$78,877.17	355,501	\$65,522.13	\$5,872.36	\$71,394.49	\$146,940.32	\$13,331.34	\$160,271.66
SAVING FOR PERIOD	770	114,240	\$38,827.17	\$1,808.24	\$40,635.41	142,638	\$17,195.59	\$1,134.63	\$18,330.22	\$46,022.76	\$2,942.87	\$48,965.63
<b>SOUTH LINE</b>												
(7) TUCSON-DOUGLAS (Three Trains Only)												
ACTUAL	122	15,128	\$4,380.73	\$444.76	\$4,825.49	15,128	\$2,496.10	\$396.87	\$2,892.97	\$6,876.83	\$1,041.63	\$7,918.46
RECEIPTED	122	15,128	\$4,380.73	\$444.76	\$4,825.49	15,128	\$2,534.40	\$402.93	\$2,937.33	\$6,915.13	\$1,047.69	\$7,962.82
INCREASE FOR PERIOD	-	-	-	-	-	-	\$38.30	\$6.06	\$44.36	\$38.30	\$6.06	\$44.36
(8) DOUGLAS-BIRMING JUNCTION												
ACTUAL	52	1,208	\$46.92	\$102.40	\$149.32	1,208	\$413.48	\$61.43	\$474.91	\$1,160.40	\$163.83	\$1,324.23
RECEIPTED	52	1,208	\$46.92	\$102.40	\$149.32	1,208	\$419.92	\$62.38	\$482.30	\$1,166.84	\$164.78	\$1,331.62
INCREASE FOR PERIOD	-	-	-	-	-	-	\$6.44	\$0.95	\$7.39	\$6.44	\$0.95	\$7.39
(9) DOUGLAS - EL PASO												
ACTUAL	122	26,596	\$6,144.30	\$652.48	\$6,796.78	26,596	\$4,318.96	\$369.87	\$4,688.83	\$10,463.26	\$1,022.35	\$11,485.61
RECEIPTED	122	26,596	\$6,367.17	\$686.30	\$7,053.47	26,596	\$4,365.49	\$373.83	\$4,739.32	\$10,932.64	\$1,060.13	\$11,992.79
INCREASE FOR PERIOD	-	-	\$222.87	\$33.82	\$256.69	-	\$446.53	\$3.96	\$450.49	\$469.40	\$37.78	\$507.18
(10) TOTAL - SOUTH LINE												
ACTUAL	296	42,932	\$11,271.95	\$1,399.64	\$12,671.59	42,932	\$7,228.54	\$826.17	\$8,054.71	\$18,500.49	\$2,227.81	\$20,728.30
RECEIPTED	296	42,932	\$11,694.82	\$1,433.46	\$13,128.28	42,932	\$7,319.81	\$839.14	\$8,158.95	\$19,024.63	\$2,272.60	\$21,297.23
INCREASE FOR PERIOD	-	-	\$422.87	\$33.82	\$456.69	-	\$91.27	\$10.97	\$102.24	\$524.14	\$44.79	\$568.93
(11) TOTAL - NORTH AND SOUTH LINES												
ACTUAL	3,268	459,103	\$121,517.31	\$10,666.86	\$132,184.17	541,271	\$89,946.26	\$7,835.16	\$97,781.42	\$211,463.57	\$18,502.02	\$229,965.59
RECEIPTED	2,498	345,863	\$73,113.01	\$8,892.44	\$82,005.45	398,433	\$72,841.94	\$6,711.50	\$79,553.44	\$165,954.95	\$15,603.94	\$181,558.89
SAVING FOR PERIOD	770	114,240	\$48,404.30	\$1,774.42	\$50,178.72	142,838	\$17,104.32	\$1,123.66	\$18,227.98	\$45,508.62	\$2,898.08	\$48,406.70
(12) Saving for year (saving for period increased in ratio of 17.89% to 100%)	4,304	638,369	\$158,771.94	\$9,918.30	\$168,690.24	798,424	\$35,608.27	\$6,280.94	\$41,889.21	\$254,380.21	\$16,199.44	\$270,579.65
(13) Railroad Retirement and Unemployment Insurance Tax; 5.45% Trainmen - 5.44% Engineers					\$9,531.00				\$5,542.77			\$15,073.77



<b>NORTH LINE</b>												
(1) TUNA - GILA												
ACTUAL	771	94,813	824,937.28	81,373.95	826,311.23	79,095	815,626.75	81,137.29	816,964.04	840,564.03	82,711.24	843,275.27
RECAPTURED	554	68,165	17,629.79	1,040.95	18,670.94	65,843	12,234.19	1,105.34	13,339.53	29,864.18	2,146.29	32,010.47
SAVING FOR PERIOD	217	26,648	7,307.49	333.00	7,640.29	29,253	3,392.56	231.95	3,624.51	10,699.85	364.95	11,064.80
(2) GILA - TUCSON												
ACTUAL	767	98,196	25,960.62	2,611.53	28,572.15	114,694	19,796.58	2,891.37	21,687.96	45,737.21	4,502.90	50,240.11
RECAPTURED	550	70,400	18,226.85	1,926.40	20,153.25	81,144	15,441.45	1,544.86	16,986.31	33,668.26	2,471.26	37,139.52
SAVING FOR PERIOD	217	27,796	7,733.77	685.13	8,418.90	33,550	4,355.13	346.51	4,701.65	12,068.95	1,031.64	13,100.59
(3) TUCSON - LONGHURST												
ACTUAL	736	123,010	35,778.99	1,673.95	37,452.94	183,874	30,962.70	1,526.76	32,489.46	66,741.69	3,200.71	69,942.40
RECAPTURED	521	85,079	24,320.35	1,205.53	25,525.88	126,497	23,309.26	1,205.53	24,514.81	47,829.61	2,411.08	50,240.69
SAVING FOR PERIOD	215	37,931	11,458.64	468.42	11,927.06	57,377	7,653.44	321.23	7,974.65	19,112.08	789.63	19,901.71
(4) LONGHURST - EL PASO (Three Trains Only)												
ACTUAL	674	100,084	23,541.13	3,603.28	27,144.41	100,647	16,315.69	2,247.41	18,563.10	39,857.02	5,850.69	45,707.71
RECAPTURED	521	77,335	20,861.16	3,238.64	24,099.80	79,083	14,313.43	1,986.61	16,302.04	35,174.59	5,227.25	40,401.84
SAVING FOR PERIOD	153	22,749	2,680.17	364.64	3,044.61	21,564	2,002.26	260.80	2,261.06	4,682.43	623.44	5,305.87
(5) EL PASO - STRANGE												
ACTUAL	4	68	27.14	4.51	31.65	68	15.99	4.16	20.15	43.13	8.67	51.80
RECAPTURED	36	952	379.84	47.46	427.30	952	223.84	28.00	251.84	603.68	75.46	679.14
INCREASE FOR PERIOD	32	884	352.70	42.95	395.65	884	207.85	23.84	231.69	560.55	66.79	627.34
(6) TOTAL - NORTH LINE												
ACTUAL	2,972	416,171	110,245.36	7,267.22	119,512.58	498,339	82,717.72	7,006.99	89,724.71	192,963.08	16,274.21	209,237.29
RECAPTURED	2,202	301,931	81,418.19	7,458.98	88,877.17	355,501	65,522.13	5,872.36	71,394.49	146,940.32	13,331.34	160,271.66
SAVING FOR PERIOD	770	114,240	28,827.17	1,808.24	30,635.41	142,838	17,195.59	1,134.63	18,330.22	46,022.76	2,942.87	48,965.61
<b>SOUTH LINE</b>												
(7) TUCSON-DOUGLAS (Three Trains Only)												
ACTUAL	122	15,128	4,380.73	644.76	5,025.49	15,128	2,496.10	396.87	2,892.97	6,876.83	1,041.63	7,918.46
RECAPTURED	122	15,128	4,380.73	644.76	5,025.49	15,128	2,534.40	402.93	2,937.33	6,915.13	1,047.69	7,962.82
INCREASE FOR PERIOD	-	-	-	-	-	-	38.30	6.06	44.36	38.30	6.06	44.36
(8) DOUGLAS-BISHOP JUNCTION												
ACTUAL	52	1,208	746.92	102.40	849.32	1,208	413.48	61.43	474.91	1,360.40	163.83	1,524.23
RECAPTURED	52	1,208	746.92	102.40	849.32	1,208	413.92	62.38	482.30	1,366.84	164.78	1,531.62
INCREASE FOR PERIOD	-	-	-	-	-	-	6.44	0.95	7.39	6.44	0.95	7.39
(9) DOUGLAS - EL PASO												
ACTUAL	122	26,596	6,144.30	652.48	6,796.78	26,596	4,318.96	369.87	4,688.83	10,463.26	1,022.35	11,485.61
RECAPTURED	122	26,596	6,267.17	686.30	7,253.47	26,596	4,365.49	373.83	4,739.32	10,932.64	1,060.13	11,992.79
INCREASE FOR PERIOD	-	-	422.87	33.82	456.69	-	46.53	3.96	50.49	469.40	37.78	507.18
(10) TOTAL - SOUTH LINE												
ACTUAL	296	42,932	11,271.95	1,399.44	12,671.59	42,932	7,228.54	828.17	8,056.71	18,500.49	2,227.81	20,728.30
RECAPTURED	296	42,932	11,694.82	1,433.46	13,128.28	42,932	7,319.81	839.14	8,158.95	19,014.63	2,272.60	21,287.23
INCREASE FOR PERIOD	-	-	422.87	33.82	456.69	-	91.27	10.97	102.24	514.14	44.79	558.93
(11) TOTAL - NORTH AND SOUTH LINES												
ACTUAL	3,268	459,103	121,517.31	10,666.66	132,184.17	541,271	89,946.26	7,835.16	97,781.42	211,463.57	18,502.02	229,965.59
RECAPTURED	2,498	344,863	93,113.01	8,892.44	102,005.45	390,433	72,841.94	6,711.50	79,533.44	165,954.95	15,603.94	181,558.89
SAVING FOR PERIOD	770	114,240	28,827.17	1,774.42	30,178.72	142,838	17,104.32	1,123.66	18,227.98	45,508.62	2,942.87	48,451.70
(12) Saving for year (saving for period increased in ratio of 17.89% to 100%)	4,304	638,969	158,771.94	9,918.50	168,690.44	798,424	95,608.27	6,280.94	101,889.21	254,320.21	16,199.44	270,579.65
(13) Railroad Retirement and Unemployment Insurance Tax; 5.45% Trainmen - 5.44% Engineers					9,531.00				5,542.77			15,073.77
(14) GRAND TOTAL					178,221.44				107,431.98			285,653.42

	SAVING FOR PERIOD	
	(Thousands)	
	YEAR 1938 (a)	TOTAL PERIOD JUNE AND AUGUST 1938 (b)
TUNA - TUCSON	2,644,436	482,145
TUCSON - LONGHURST	1,747,885	308,788
LONGHURST - EL PASO	1,536,795	279,795
TUCSON - EL PASO VIA DOUGLAS	457,857	75,158
TOTAL	6,385,373	1,146,086
PER CENT TOTAL PERIOD JUNE AND AUGUST TO YEAR 1938	17	%

**Defendant's Exhibit No. 230 (Witness Sines)**  
**Jan. 30, 1941**

**SOUTHERN PACIFIC COMPANY**  
**(Pacific Lines)**

**LOS ANGELES, CALIFORNIA TO EL PASO, TEXAS**  
**PASSENGER INTERSECTION STUDY FOR YEAR 1938.**  
**STATISTICS OF OPERATION OF SECOND AND EXTRA SECTIONS**  
**OF PASSENGER TRAINS CAUSED BY OBSERVANCE OF**  
**ARIZONA 14-CAR LIMIT LAW.**

TRAIN NO. (a)	LIMITS (b)	TIMES (c)	TRAIN MILES (d)	LOCOMOTIVE MILES		
				PRINCIPAL (e)	LIGHT & HELPER (f)	TOTAL (g)
<b>EASTWARD</b>						
2	Yuma, Arizona to El Paso, Texas, via Phoenix and Bowie, 605 miles	1	605	605	0- 139	466
	Yuma, Arizona to Lordsburg, New Mexico via Gila, 415 miles	1	415	415	0- 164	251
4	Yuma, Arizona to El Paso, Texas via Phoenix and Bowie, 605 miles	1	605	605	212	917
6	Yuma, Arizona to El Paso, Texas via Gila and Bowie, 562 miles	6	3,372	3,372	0- 648	2,724
	Tucson, Arizona to Lordsburg, New Mexico, 164 miles	1	164	164	-	164
	<b>TOTAL EASTWARD</b>	<b>10</b>	<b>5,161</b>	<b>5,161</b>	<b>0- 639</b>	<b>4,522</b>
<b>WESTWARD</b>						
1	El Paso, Texas to Yuma, Arizona, via Bowie and Phoenix, 605 miles	1	605	605	121	726
	Lordsburg, New Mexico to Los Angeles, Calif., via Phoenix, 708 miles	1	708	708	403	1,111
	Lordsburg, New Mexico to Yuma, Arizona via Gila, 665 miles	1	414	414	164	578
	Deadhead equipment train Yuma to Tucson in opposite direction, 251 miles	1	251	251	-	251
	Tucson to Yuma via Phoenix, 294 miles	2	588	588	120	708
3	El Paso, Texas to Yuma, Arizona via Douglas and Phoenix, 635 miles	1	635	635	-	635
	El Paso, Texas to Tucson, Arizona via Douglas, 341 miles	1	341	341	343	684
	Tucson, Arizona to Yuma, Arizona via Phoenix, 294 miles	1	294	294	295	589
	Tucson, Arizona to Yuma, Arizona via Gila, 251 miles	1	251	251	251	502
5	El Paso, Texas to Yuma, Arizona via Bowie and Gila, 562 miles	1	562	562	311	873
	Tucson, Arizona to Los Angeles, Calif., via Phoenix, 545 miles	3	1,635	1,635	510	2,145
	Phoenix, Arizona to Los Angeles, Calif., 434 miles	1	434	434	101	535
	Phoenix, Arizona to Yuma, Arizona, 174 miles	1	174	174	-	174
43	El Paso, Texas to Los Angeles, Calif., via Bowie and Gila, 813 miles	1	813	813	485	1,298
	Lordsburg, New Mexico to Yuma, Arizona via Gila, 414 miles	2	828	828	709	1,537
	Lordsburg, New Mexico to Tucson, Arizona, 163 miles	2	326	326	328	654
	Douglas, Ariz.-Mexico; New Mexico turnaround trains, 104 miles per round trip	2	208	208	-	208
	Calton-Indie California helper service	-	-	-	1,140	1,140
	<b>TOTAL WESTWARD</b>	<b>23</b>	<b>9,057</b>	<b>9,057</b>	<b>5,281</b>	<b>14,338</b>
	<b>TOTAL EASTWARD AND WESTWARD</b>	<b>33</b>	<b>14,218</b>	<b>14,218</b>	<b>4,642</b>	<b>18,860</b>
Partial offset to saving of 545 train miles by elimination of second No. 5 from Tucson, Arizona to Los Angeles, California on December 19, 1938, would be the addition of 150 motor car miles Phoenix to Pecoshe and return to handle passengers moving on train No. 43 via Gila instead of second No. 5 via Phoenix,						
0- 150 motor car miles						

0- 150 motor car miles

**Defendant's Exhibit No. 231 (Witness Sines)**  
**Jan. 30, 1941**

**SOUTHERN PACIFIC COMPANY**  
**(Pacific Lines)**

**LOS ANGELES, CALIFORNIA, TO EL PASO, TEXAS  
SAVING IN PASSENGER TRAIN SERVICE AND  
COSTS ACCOUNT DISCONTINUANCE OF 14 CAR LIMIT  
ON PASSENGER TRAINS IN ARIZONA**

**YEAR 1938**

	TOTAL (I)	BETWEEN LOS ANGELES, CALIFORNIA AND TUMA, ARIZONA (II)			BETWEEN TUMA, ARIZONA AND EL PASO, TEXAS (III)			
<b>STEAM PASSENGER TRAIN SERVICE</b>								
(1) Train miles saved	14,213	1,906			12,712			
(2) Locomotive miles saved	17,720	1,915			15,805			
(3) Costs:	TYPE	QUANTITY (a)	UNIT COST (b)	TOTAL COST (c)	QUANTITY (a)	UNIT COST (b)	TOTAL COST (c)	TOTAL (d)
(3-A) Fuel	Locomotive Miles	1,915	\$0.1298	\$ 249	15,805	\$0.0910	\$1,438	
(3-B) Enginemen	Wages - Direct	-	-	278	-	-	2,501	
(3-C) Trainmen	Wages - Direct	-	-	263	-	-	2,309	
(3-D) Enginehouses	Locomotive Miles	1,915	0.0198	38	15,805	0.0198	313	
(3-E) Other Locomotive Supplies	Locomotive Miles	1,915	0.0234	45	15,805	0.0234	370	
(3-F) Locomotive Repairs	Locomotive Miles	1,915	0.1960	299	15,805	0.1960	2,466	
(3-G) TOTAL				\$1,172			\$9,397	\$10,569
<b>HELMER LOCOMOTIVE SERVICE</b>								
(4) Helmer locomotive mileage saved, Colton to Indio			1,140					
(5) Costs:								
(5-A) Fuel	Locomotive Miles	1,140	\$0.1298	\$ 148				
(5-B) Enginemen	Wages-No Saving	-	-	-				
(5-C) Trainmen	Wages-No Saving	-	-	-				
(5-D) Enginehouses	Locomotive Miles	1,140	0.0198	23				
(5-E) Other Locomotive Supplies	Locomotive Miles	1,140	0.0234	27				
(5-F) Locomotive Repairs	Locomotive Miles	1,140	0.1960	178				
(5-G) TOTAL				\$ 376				\$376
(6) TOTAL								\$10,945
<b>GASOLINE MOTOR CAR OPERATION</b>								
(7) Motor car miles added Phoenix to Piencho and return					150			
(8) Cost (deduction from saving) car miles					150	\$0.4049	\$61	61
(9) NET SAVING IN PASSENGER COSTS ACCOUNT DISCONTINUANCE ARIZONA 14 CAR LIMIT								\$10,884



Defendant's Exhibit No. 232 (Witness Sines)

Jan. 30, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

PASSENGER REDEPATCH STUDY - YEAR 1938  
LOS ANGELES, CALIFORNIA TO EL PASO, TEXAS  
EXTRA-TERRITORIAL EFFECT OF ARIZONA TRAIN LIMIT LAW  
BETWEEN LOS ANGELES, CALIFORNIA AND YUMA, ARIZONA,  
AND ARIZONA-NEW MEXICO STATE LINE AND EL PASO, TEXAS

DISTRICT

1 - Los Angeles, California to Yuma, Arizona

Refer to Exhibit No

Train miles saved	1,506	
Estimated monetary saving		\$1,172
Helper locomotive miles saved	1,140	
Estimated monetary saving		\$ 376

2 - Arizona-New Mexico State Line to El Paso, Texas

Refer to Exhibits No. 230 and 231

Train miles saved	2,396	
Estimated monetary saving 2,396 train miles times \$0.7392 (*) equals		<u>\$1,771</u>

3 - TOTAL

\$3,319

(\*) - Exhibit No. 231 shows saving of \$9,397 Yuma, Arizona  
to El Paso, Texas and 12,712 train miles eliminated;  
equals \$0.7392 per train mile saved.

Defendant's Exhibit No. 233 (Witness Sines)  
Jan. 30, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

REDISPATCH STUDY - OPERATING STATISTICS

TUCSON - PHOENIX

MONTH OF DECEMBER, 1938

LINE NO.		NUMBER OF TRAINS (a)	TRAIN MILES (b)	LOCOMOTIVE MILES (c)	NUMBER OF CARS (d)	CARS PER TRAIN (e)
	<u>TUCSON-PHOENIX (THROUGH)</u>					
1	Actual handling	118	14,176	14,416	6,812	57.7
2	Redispatched handling	97	11,656	11,656	6,812	70.2
3	Saving for month	21	2,520	2,760	-	-
	<u>PHOENIX ROUSTABOUT</u>					
4	Actual handling	-	-	-	-	-
5	Redispatched handling	4	254	254	-	-
6	Increase for month	4	254	254	-	-
	<u>SUMMARY</u>					
7	Actual handling	118	14,176	14,416	6,812	-
8	Redispatched handling	101	11,910	11,910	6,812	-
9	Saving for month	17	2,266	2,506	-	-

**Defendant's Exhibit No. 234 (Witness Sines)**  
**Jan. 30, 1941**

**SOUTHERN PACIFIC COMPANY**  
**(Pacific Lines)**

MAIN LINE FREIGHT TRAINS OF VARIOUS LENGTHS  
 OPERATED BETWEEN YUMA, ARIZONA AND EL PASO, TEXAS  
 VIA GILA, ARIZONA, AND LORDBURG, NEW MEXICO, AND  
 VIA DOUGLAS, ARIZONA, OVER SOUTH LINE  
 DURING PERIOD APRIL 4TH TO APRIL 30TH, 1940, INCLUSIVE  
 ACTUAL OPERATION COMPARED WITH REDISPATCHED OPERATION,  
 OBSERVING 70-CAR RESTRICTION AND USING PRESENT POWER AND SHORT SIDINGS

ACTUAL									REDISPATCH											
	50 AND LESS	51 TO 60	61 TO 70	71 TO 80	81 TO 90	91 TO 100	101 TO 110	TOTAL	50 AND LESS	51 TO 60	61 TO 70	71 TO 80	81 TO 90	91 TO 100	101 TO 110	TOTAL				
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)				
YUMA - GILA (123 Miles)	EAST	6	20	137	7	4	1	-	175	6	16	154	-	-	-	-	176			
	WEST	2	34	89	13	19	45	-	202	2	29	192	-	-	-	-	223			
	TOTAL	8	54	226	20	23	46	-	377	8	45	346	-	-	-	-	399			
PER CENT OF TOTAL		2.12	14.32	59.95	5.31	6.10	12.20	-	100	2.01	11.28	86.71	-	-	-	-	100			
GILA - TUCSON (128 Miles)	EAST	10	18	135	11	4	1	-	179	6	20	154	-	-	-	-	180			
	WEST	3	24	104	6	25	41	-	203	2	24	196	-	-	-	-	224			
	TOTAL	13	42	239	17	29	42	-	382	8	44	352	-	-	-	-	404			
PER CENT OF TOTAL		3.40	11.00	62.56	4.45	7.59	11.00	-	100	1.98	10.89	87.13	-	-	-	-	100			
TUCSON - LORDSBURG (164 Miles East) (163 Miles West)	EAST	16	31	144	6	1	-	-	198	16	30	153	-	-	-	-	199			
	WEST	21	54	40	237	58	5	-	215	21	54	159	-	-	-	-	234			
	TOTAL	37	85	184	243	59	5	-	413	37	84	312	-	-	-	-	433			
PER CENT OF TOTAL		8.96	20.58	44.55	10.41	14.29	1.21	-	100	8.55	19.40	72.05	-	-	-	-	100			
LORDSBURG - EL PASO (148 Miles East) (149 Miles West)	EAST	23	26	112	8	8	10	1	188	23	25	115	5	9	11	-	188			
	WEST	2	34	72	4	4	70	4	190	2	32	74	3	5	69	5	190			
	TOTAL	25	60	184	12	12	80	5	378	25	57	189	8	14	80	5	378			
PER CENT OF TOTAL		6.61	15.87	48.68	3.17	3.18	21.17	1.32	100	6.62	15.08	50.00	2.12	3.70	21.16	1.32	100			
GRAND TOTAL (YUMA - EL PASO)		83	241	833	292	123	173	5	1,550	78	230	1,199	8	14	80	5	1,614			
RECAPITULATION				# One train departed Lordsburg with 71 cars; reduced to 70 cars at State Line					RECAPITULATION											
TOTAL TRAINS OVER 70 CARS				393 25.35%					TOTAL TRAINS OVER 70 CARS								107 6.63%			
TOTAL TRAINS 70 CARS AND UNDER				1,157 74.65%					TOTAL TRAINS 70 CARS AND UNDER								1,507 93.37%			
TOTAL TRAINS				1,550 100.00%					TOTAL TRAINS								1,614 100.00%			
TUCSON - DOUGLAS (125 Miles East) (124 Miles West)	EAST	15	5	14	1	-	-	-	35	14	6	15	-	-	-	-	35			
	WEST	5	4	23	2	2	-	-	36	5	4	27	-	-	-	-	36			
	TOTAL	20	9	37	3	2	-	-	71	19	10	42	-	-	-	-	71			
PER CENT OF TOTAL		28.16	12.68	52.11	4.23	2.82	-	-	100	26.76	14.09	59.15	-	-	-	-	100			
DOUGLAS - EL PASO (217 Miles East) (218 Miles West)	EAST	26	2	1	-	-	-	-	29	27	2	-	-	-	-	-	29			
	WEST	3	3	14	-	5	2	1	28	3	3	18	-	11	12	11	28			
	TOTAL	29	5	15	-	5	2	1	57	30	5	18	-	11	12	11	57			
PER CENT OF TOTAL		50.88	8.77	26.32	-	8.77	3.51	1.75	100	52.63	8.77	31.58	-	1.75	3.51	1.76	100			
DOUGLAS - KIRKBY JCT. (22 Miles)	EAST	1	2	20	-	1	-	-	24	1	2	21	-	-	-	-	24			
	WEST	-	4	12	8	-	-	-	24	-	4	20	-	-	-	-	24			



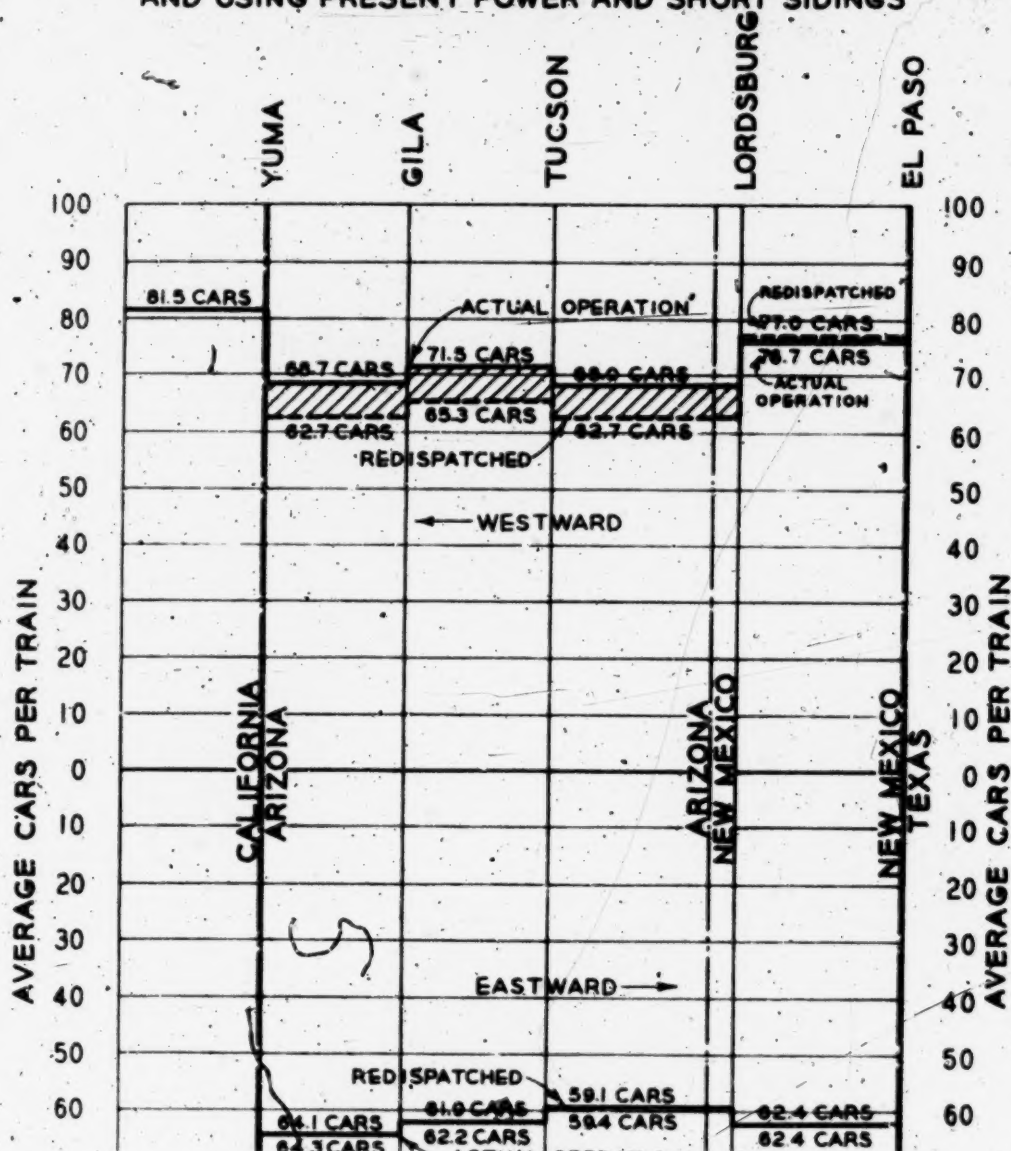
		AND LESS	70 60	70 70	70 80	70 90	100	110	TOTAL	LESS	60	70	80	90	100	110	TOTAL
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
YUMA - GILA (123 Miles)	EAST	6	20	137	7	4	1	-	175	6	16	154	-	-	-	-	176
	WEST	2	34	89	13	19	45	-	202	2	29	192	-	-	-	-	223
	TOTAL	8	54	226	20	23	46	-	377	8	45	346	-	-	-	-	399
PER CENT OF TOTAL		2.12	14.32	59.25	5.31	6.10	12.20	-	100	2.01	11.28	86.71	-	-	-	-	100
GILA - TUCSON (128 Miles)	EAST	10	18	135	11	4	1	-	179	6	20	154	-	-	-	-	180
	WEST	3	24	104	6	25	41	-	203	2	24	198	-	-	-	-	224
	TOTAL	13	42	239	17	29	42	-	382	8	44	352	-	-	-	-	404
PER CENT OF TOTAL		3.40	11.00	62.56	4.45	7.59	11.00	-	100	1.98	10.89	87.13	-	-	-	-	100
TUCSON - LORDESBURG (164 Miles East) (163 Miles West)	EAST	16	31	144	6	1	-	-	198	16	30	153	-	-	-	-	199
	WEST	21	54	40	37	58	5	-	215	21	54	159	-	-	-	-	234
	TOTAL	37	85	184	43	59	5	-	413	37	84	312	-	-	-	-	433
PER CENT OF TOTAL		8.96	20.58	44.55	10.41	14.24	1.21	-	100	8.55	19.40	72.05	-	-	-	-	100
LORDESBURG - EL PASO (148 Miles East) (149 Miles West)	EAST	23	26	112	8	8	10	1	188	23	25	115	5	9	11	-	188
	WEST	2	34	72	4	4	70	4	190	2	32	74	3	5	69	5	190
	TOTAL	25	60	184	12	12	80	5	378	25	57	189	8	14	80	5	378
PER CENT OF TOTAL		6.61	15.87	48.68	3.17	3.18	21.17	1.32	100	6.62	15.08	50.00	2.12	3.70	21.16	1.32	100
GRAND TOTAL (YUMA - EL PASO)		83	241	833	92	123	173	5	1,550	78	230	1,199	8	14	80	5	1,614
RECAPITULATION TOTAL TRAINS OVER 70 CARS 393 25.35% TOTAL TRAINS TO CARS AND UNDER 1,157 74.65% TOTAL TRAINS 1,550 100.00%										RECAPITULATION TOTAL TRAINS OVER 70 CARS 107 6.63% TOTAL TRAINS TO CARS AND UNDER 1,507 93.37% TOTAL TRAINS 1,614 100.00%							
TUCSON - DOUGLAS (123 Miles East) (124 Miles West)	EAST	15	5	14	1	-	-	-	35	14	6	15	-	-	-	-	35
	WEST	5	4	23	2	-	-	-	36	5	4	27	-	-	-	-	36
	TOTAL	20	9	37	3	2	-	-	71	19	10	42	-	-	-	-	71
PER CENT OF TOTAL		28.16	12.68	52.11	4.23	2.82	-	-	100	26.76	14.09	59.15	-	-	-	-	100
DOUGLAS - EL PASO (217 Miles East) (218 Miles West)	EAST	26	2	1	-	-	-	-	29	27	2	-	-	-	-	-	29
	WEST	3	3	14	-	5	2	1	20	3	3	18	-	1	2	1	28
	TOTAL	29	5	15	-	5	2	1	57	30	5	18	-	1	2	1	57
PER CENT OF TOTAL		50.88	8.77	26.32	-	8.77	3.51	1.75	100	52.63	8.77	31.58	-	1.75	3.51	1.76	100
DOUGLAS - BIRNEY JCT. (22 Miles)	EAST	1	2	20	-	1	-	-	24	1	2	21	-	-	-	-	24
	WEST	-	4	12	8	-	-	-	24	-	4	20	-	-	-	-	24
	TOTAL	1	6	32	8	1	-	-	48	1	6	41	-	-	-	-	48
PER CENT OF TOTAL		2.08	12.50	66.67	16.67	2.08	-	-	100	2.08	12.50	85.42	-	-	-	-	100
GRAND TOTAL (TUCSON - EL PASO)		50	20	84	11	8	2	1	176	50	21	101	-	1	2	1	176
RECAPITULATION TOTAL TRAINS OVER 70 CARS 22 12.50% TOTAL TRAINS TO CARS AND UNDER 154 87.50% TOTAL TRAINS 176 100.00%										RECAPITULATION TOTAL TRAINS OVER 70 CARS 4 2.27% TOTAL TRAINS TO CARS AND UNDER 172 97.73% TOTAL TRAINS 176 100.00%							

Defendant's Exhibit No. 235 (Witness Sines  
Jan. 30, 1941

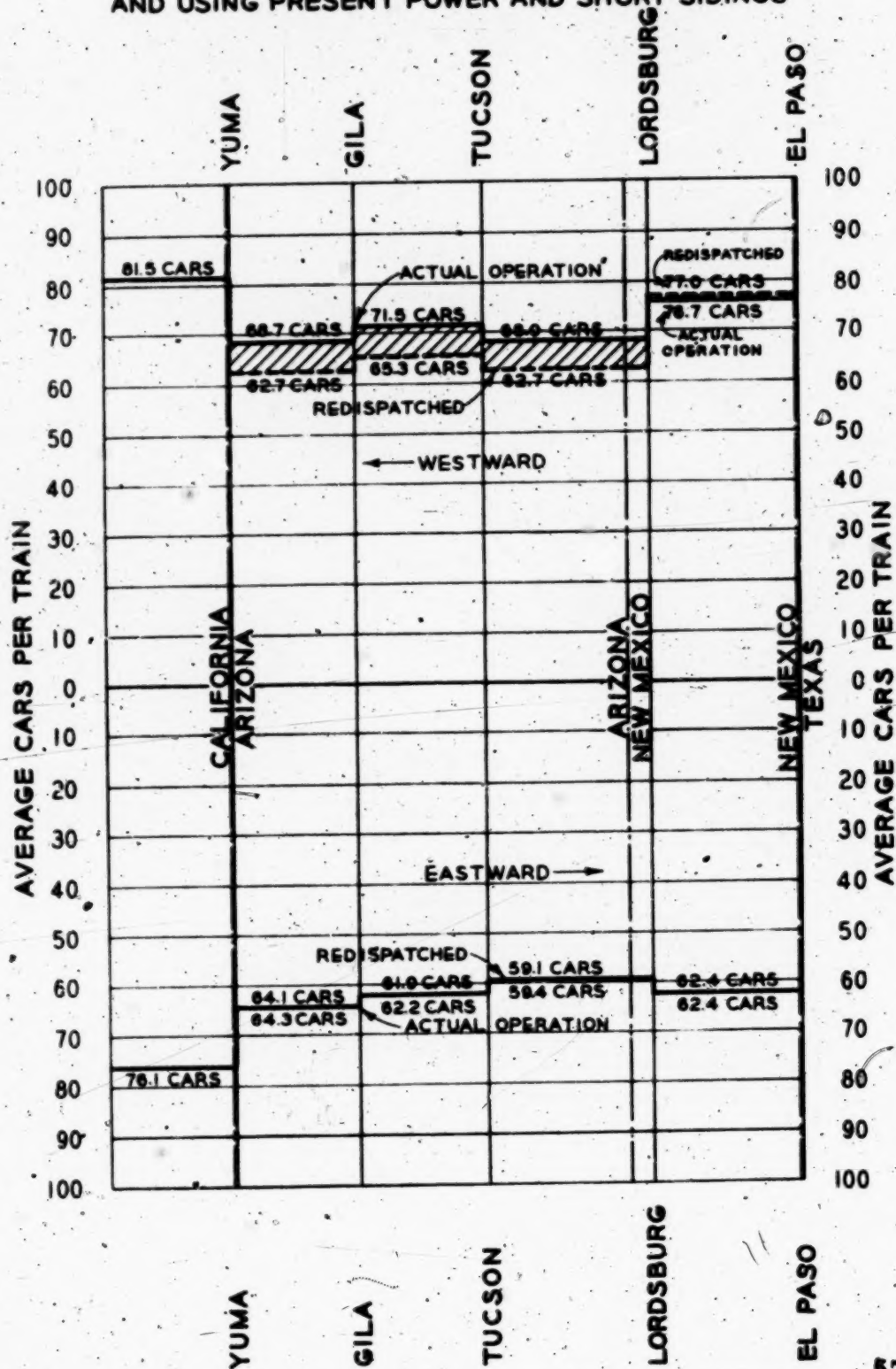
SOUTHERN PACIFIC COMPANY

# RELATIVE TRAIN LENGTHS

CALIFORNIA-ARIZONA-NEW MEXICO-TEXAS  
THROUGH AND LOCAL FREIGHT TRAINS JAN 30 1941  
OPERATING VIA YUMA, GILA, TUCSON, LORDSBURG AND EL PASO  
BASED ON REDISPATCHING STUDY OF APRIL 1940  
OBSERVING 70 CAR RESTRICTION  
AND USING PRESENT POWER AND SHORT SIDINGS



# AND USING PRESENT POWER AND SHORT SIDINGS





**Defendant's Exhibit No. 236 (Witness Sines)**  
**Jan. 30, 1941**

**SOUTHERN PACIFIC COMPANY**  
**(Pacific Lines)**

**REDESIGN STAGE - OPERATING STATISTICS**  
**TUPEA, ARIZONA TO EL PASO, TEXAS**  
**FOR PERIOD APRIL 4TH TO APRIL 30TH, 1940**  
**ACTUAL OPERATION COMPARED WITH REDESIGNED OPERATION,**  
**CONSIDERING TO CAR RESTRICTIONS AND USING FREIGHT POWER AND SHORT SIDINGS**

	NUMBER OF TRAINS (a)	TRAIN MILES (b)	OTHER LOCOMOTIVE MILES (c)	TOTAL LOCOMOTIVE MILES (d)	NUMBER OF CARS (e)	CARS PER TRAIN (f)
<b><u>NORTH LINE</u></b>						
<b>I - Yuma - Gila</b>						
Redesign	309	48,077	5,145	53,222	25,279	68.4
Actual	377	44,371	2,725	47,096	25,155	66.6
Increase for period	22	2,706	2,420	6,026	(1) 124	(D) 2.2
<b>II - Gila - Tucson</b>						
Redesign	404	51,542	9,087	60,629	25,771	65.8
Actual	388	48,745	7,991	56,736	25,645	67.1
Increase for period	22	2,816	1,096	4,093	(2) 126	(D) 2.3
<b>III - Tucson - Lordsburg</b>						
Redesign	435	70,585	21,125	91,710	26,447	61.1
Actual	413	67,318	21,284	88,602	26,376	65.9
Increase for period	20	3,267	(D) 240	2,908	(3) 71	(D) 2.8
<b>IV - Lordsburg - El Paso</b>						
Redesign	378	54,134	231	54,365	24,347	68.8
Actual	378	54,134	231	54,365	24,310	68.5
Increase for period	-	-	-	-	(4) 37	.3
<b>V - TOTAL NORTH LINE</b>						
Redesign	1,514	227,532	44,375	271,907	103,005	64.4
Actual	1,500	215,539	42,200	257,739	102,445	66.7
Increase for period	14	11,993	2,175	14,168	(5) 412	(D) 2.3
<b><u>SOUTH LINE</u></b>						
<b>VI - Tucson-Douglas (Through trains only)</b>						
Redesign	71	8,805	810	9,615	3,382	49.7
Actual	71	8,805	810	9,615	3,377	49.4
Increase for period	-	-	-	-	(6)(D) 45	(D) .7
<b>VII - Douglas-El Paso Jct. (Turnaround trains only)</b>						
Redesign	48	1,080	-	1,080	3,105	64.7
Actual	48	1,080	-	1,080	3,171	66.1
Increase for period	-	-	-	-	(7)(D) 65	(D) 1.4
<b>VIII - Douglas - El Paso</b>						
Redesign	87	12,434	215	12,649	3,977	47.0
Actual	87	12,434	215	12,649	3,734	48.0
Increase for period	-	-	-	-	(8)(D) 243	(D) 1.0
<b>IX - TOTAL SOUTH LINE</b>						
Redesign	176	22,524	1,025	23,549	9,315	(9)48.5
Actual	176	22,524	1,025	23,549	9,482	(9)49.3
Increase for period	-	-	-	-	(9) 167	(9)(D)0.8
<b>X - TOTAL NORTH AND SOUTH LINE</b>						
Redesign	1,700	249,801	47,400	297,207	112,179	(10)63.2
Actual	1,700	240,899	43,415	284,314	111,935	(10)63.4
Increase for period	0	8,902	3,985	12,893	244	(10)(D) 2.8

D - Indicates Decrease

- (1) **Tum - Gila District:** Increase 20 additional engine water cars east, 20 additional deadhead empties, 21 additional engine water cars west, and 95 west empties which moved via Phoenix line in actual operation, and via Gila line in redispached operation, total 156 cars.
- (2) **Gila - Tucson District:** Increase 12 additional deadhead empties east, 21 additional engine water cars west, and 95 west empties which moved via Phoenix line in actual operation and via Gila line in redispached operation, total 128 cars.
- (3) **Tucson - Lordsburg District:** Increase 14 additional deadhead empties and 97 west empties which moved via south line in actual operation and via north line in redispached operation, total 111 cars.
- (4) **Lordsburg-El Paso District:** Increase 97 west empties which moved via south line in actual operation and via north line in redispached operation.
- (5) **Increase - sum of (1), (2), (3) and (4) in column (a) on sheet 1.**
- (6) **Tucson-Douglas (Through trains only):** Decrease account 97 west empties which moved via south line in actual and via north line in redispached operation, and 8 loads, 4 empties, which moved on eastward Bisbee Jet. turnaround train in actual operation and on eastward through train in redispached operation, produce net difference of 49 cars.
- (7) **Douglas-Bisbee District (Turnaround trains only):** Decrease account 35 west empties from Douglas and 20 west empties from Calumet which were moved on turnaround trains in actual operation, and by through trains in redispached operation, and 8 loads, 4 empties which were moved by an eastward turnaround train in actual operation and by a through eastward train in redispached operation, total 65 cars.
- (8) **Douglas-El Paso District:** Account 97 west empties which moved via south line in actual operation and north line in redispached operation.
- (9) **Average cars per train computed for total south line omitting 49 Douglas - Bisbee Jet. turnaround trains and cars handled by these trains. (Actual 3,171 cars; redispached 3,106 cars.)**
- (10) **Average cars per train computed for total north and south lines omitting 49 Douglas - Bisbee Jet. turnaround trains and cars handled by these trains. (Actual 3,171 cars, redispached 3,106 cars.)**

Defendant's Exhibit No. 237 (Witness Sines)  
Jan. 30, 1941

JAN 30 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

ARRIVAL TIME AT EL PASO, TEXAS, OF FRUIT BLOCKS AND MANIFEST SECTIONS  
ACTUAL OPERATION COMPARED WITH REDISPATCHED OPERATION, OBSERVING 70-CAR RESTRICTION  
AND USING PRESENT POWER AND SHORT SIDINGS  
APRIL 4TH TO MAY 1ST, INCLUSIVE, 1940

SUMMARY

(1) NUMBER OF TRAINS ARRIVING EL PASO - ACTUAL, . . . . .	165
(2) NUMBER OF TRAINS ARRIVING EL PASO - REDISPATCH, . . . . .	165
(3) NUMBER OF BLOCKS AND MANIFEST SECTIONS INVOLVED - ACTUAL, . . . . .	183
REDISPATCH, . . . . .	185
(4) NUMBER OF REDISPATCHED BLOCKS ARRIVING EL PASO:	
(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	134
(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	40
(c) LATER THAN ACTUAL BLOCKS, . . . . .	11
(5) TOTAL TIME	
(a) IN ADVANCE OF ACTUAL, . . . . .	38 Hrs. 55 Mins.
(b) LATER THAN ACTUAL, . . . . .	8 Hrs. 10 Mins.
(6) AVERAGE TIME OF 40 BLOCKS IN ADVANCE OF ACTUAL, (MINUTES), . . . . .	58
(7) AVERAGE TIME OF 11 BLOCKS LATER THAN ACTUAL, (MINUTES), . . . . .	45

A = ARIZONA PERISHABLE BLOCK  
C = COLTON PERISHABLE BLOCK  
Y = YUMA PERISHABLE BLOCK  
CY = COLTON OVERFLOW OR YUMA BLOCK ON COLTON SCHEDULE  
CYA = SECOND COLTON OVERFLOW OR SECOND YUMA BLOCK ON COLTON SCHEDULE  
M = MEXICAN PERISHABLE  
SSE = SUNSET EAST MANIFEST



DATE (a)	PERMISSIBLE BLOCK OR MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL EL PASO (c)	PERMISSIBLE BLOCK OR MANIFEST IDENTIFICATION (d)	REDESPATCHED ARRIVAL EL PASO (e)	OPERATIONS SAME AS ACTUAL (f)	REDESPATCHED IN ADVANCE OF ACTUAL (g)	REDESPATCHED LATER THAN ACTUAL (h)
4-4-40	A 87	7:35 PM	A 87	7:35 PM	Same		
	A 88	9:30 PM	A 88	9:30 PM	Same		
4-5-40	CYA 211)		CYA 211)		Same		
	C 212)	7:30 AM	C 212)	7:30 AM	Same		
	C 213	8:00 AM	C 213	8:00 AM	Same		
	C 214	11:55 AM	C 214	11:55 AM	Same		
	CY 214	1:25 PM	CY 214	1:25 PM	Same		
	Y 213	6:40 PM	Y 213	6:40 PM	Same		
	A 89	8:25 PM	A 89	8:25 PM	Same		
	A 90	9:00 PM	A 90	9:00 PM	Same		
4-6-40	CYA 214	7:30 AM	CYA 214	7:30 AM	Same		
	C 215	7:40 AM	C 215	7:40 AM	Same		
	C 216	8:30 AM	C 216	8:30 AM	Same		
	C 217	12:30 PM	C 217	12:30 PM	Same		
	Y 214	5:00 PM	Y 214	5:00 PM	Same		
	A 91	7:10 PM	A 91	7:10 PM	Same		
4-7-40	CY 217	5:05 AM	(Part CY 217)			4 Hr. 05 Min	1 Hr. 30 Min
	C 218	10:40 AM	C 218	6:35 AM			
	C 219	11:45 AM	(Part CY 217)			3 Hr. 30 Min	3 Hr. 30 Min
		(11:45 AM)	C 219	8:15 AM		3 Hr. 30 Min	
			CY 219	8:35 AM			
	C 220	2:15 PM	C 220	2:15 PM	Same		
	Y 215	6:05 PM	Y 215	5:55 PM		20 Min.	
	A 92	8:45 PM	A 92	8:45 PM	Same		
	H 17	9:25 PM	H 17	9:10 PM		15 Min.	
4-8-40	CY 220	8:25 AM	CY 220	8:25 AM	Same		
	C 221	9:40 AM	C 221	8:35 AM		1 Hr. 05 Min	
	C 222	11:45 AM	C 222	9:40 AM		2 Hr. 05 Min	
	C 223	12:15 PM	C 223	12:15 PM	Same		
	CY 223	1:40 PM	CY 223	1:40 PM	Same		
	Y 216	6:35 PM	Y 216	6:35 PM	Same		
	A 93	7:00 PM	A 93	7:00 PM	Same		
4-9-40	CYA 223	6:10 AM	CYA 223	6:10 AM	Same		
	C 224	8:15 AM	C 224	6:20 AM		1 Hr. 55 Min	
	C 225	11:15 AM	C 225	7:30 AM		3 Hr. 25 Min.	
	C 226	12:35 PM	C 226	1:15 PM			40 Min.
	A 94	8:00 PM	A 94	8:00 PM	Same		
	Y 217	9:20 PM	Y 217	8:05 PM		1 Hr. 15 Min	

4-6-40	Y 213	8:45 PM		8:25 PM	Same		
	A 89	8:25 PM	A 89	9:00 PM	Same		
	A 90	9:00 PM	A 90	7:30 AM	Same		
	CIA 214	7:30 AM	CIA 214	7:40 AM	Same		
	C 215	7:40 AM	C 215	8:30 AM	Same		
	C 216	8:30 AM	C 216	12:30 PM	Same		
	C 217	12:30 PM	C 217	5:00 PM	Same		
	Y 214	5:00 PM	Y 214	7:30 PM	Same		
	A 91	7:30 PM	A 91				
	OT 217	5:05 AM	(Part OT 217)	6:35 AM		4 Hr. 05 Min	1 Hr. 30 Min
4-7-40	C 218	10:40 AM	C 218				3 Hr. 30 Min
	C 219	11:45 AM	(Part OT 217)	8:15 AM		3 Hr. 30 Min	3 Hr. 30 Min
		(11:45 AM)	C 219	8:35 AM		3 Hr. 30 Min	
	C 220	2:15 PM	C 220	2:15 PM	Same		
	Y 215	6:05 PM	Y 215	5:55 PM		10 Min.	
	A 92	8:45 PM	A 92	8:45 PM	Same		
	H 17	9:25 PM	H 17	9:10 PM		15 Min.	
	OT 220	8:25 AM	OT 220	8:25 AM	Same		
	C 221	9:40 AM	C 221	8:35 AM		1 Hr. 05 Min	
	C 222	11:45 AM	C 222	9:40 AM		2 Hr. 05 Min	
4-8-40	C 223	12:15 PM	C 223	12:15 PM	Same		
	OT 223	1:40 PM	OT 223	1:40 PM	Same		
	Y 216	6:55 PM	Y 216	6:55 PM	Same		
	A 93	7:00 PM	A 93	7:00 PM	Same		
	CIA 223	6:10 AM	CIA 223	6:10 AM	Same		
	C 224	8:15 AM	C 224	6:20 AM		1 Hr. 55 Min	
	C 225	11:15 AM	C 225	7:30 AM		3 Hr. 25 Min	
	C 226	12:35 PM	C 226	1:15 PM			40 Min.
	A 94	8:00 PM	A 94	8:00 PM	Same		
	Y 217	9:20 PM	Y 217	8:05 PM		1 Hr. 15 Min	
4-10-40	OT 226	6:00 AM	OT 226	7:00 AM			1 Hr.
	C 227	7:45 AM	C 227	7:35 AM		10 Min.	
	Y 218)	7:25 PM	Y 218)	7:25 PM	Same		
	A 95)		A 95)		Same		
	H 18	1:10 AM	H 18	1:10 AM	Same		
	OT 227	7:00 AM	OT 227	7:00 AM	Same		
	C 228	7:05 AM	C 228	7:05 AM	Same		
	C 229	8:40 AM	C 229	8:40 AM	Same		
	C 230	9:55 AM	C 230	9:55 AM	Same		
	Y 219	6:40 PM	Y 219	6:40 PM	Same		
4-11-40	A 96	6:55 PM	A 96	6:55 PM	Same		

DATE (a)	PERMISSIBLE BLOCK OR MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL EL PASO (c)	PERMISSIBLE BLOCK OR MANIFEST IDENTIFICATION (d)	REDESPATCHED ARRIVAL EL PASO (e)	OPERATIONS SAME AS ACTUAL (f)	REDESPATCHED IN ADVANCE OF ACTUAL (g)	REDESPATCHED LATER THAN ACTUAL (h)
4-12-40	GT 230	8:45 AM	GT 230	8:45 AM	Same		
	C 231	8:50 AM	C 231	8:50 AM	Same		
	C 232	10:10 AM	C 232	10:10 AM	Same		
	GT 232	11:25 AM	GT 232	11:40 AM			15 Min.
	C 233	1:00 PM	C 233	12:30 PM		40 Min.	
	Y 230	6:50 PM	Y 230	6:50 PM	Same		
	A 97	7:25 PM	A 97	7:25 PM	Same		
4-13-40	C 234	6:40 AM	C 234	6:40 AM	Same		
	GT 233	7:50 AM	GT 233	7:50 AM	Same		
	C 235	8:25 AM	C 235	8:25 AM	Same		
	GT 235	8:30 AM	GT 235	8:30 AM	Same		
	C 236	12:40 PM	C 236	12:40 PM	Same		
	Y 221	6:15 PM	Y 221	6:15 PM	Same		
	A 98	6:45 PM	A 98	6:45 PM	Same		
4-14-40	Part GT 236 } C 237 }	5:55 AM	Part GT 236 } C 237 }	5:05 AM		50 Min. 50 Min.	
	Part GT 236 } C 238 }	7:25 AM	Part GT 236 } C 238 }	7:10 AM		15 Min. 15 Min.	
	GT 238	8:15 AM	GT 238	7:35 AM		40 Min.	
	C 239	2:25 PM	C 239	1:55 PM		30 Min.	
	Y 222	7:00 PM	Y 222	7:05 PM			05 Min.
	A 99	7:30 PM	A 99	7:30 PM	Same		
	Part GT 239 } C 240 }	6:55 AM	Part GT 239 } C 240 }	6:55 AM	Same Same		
4-15-40	Part GT 239 } GT 240 }	7:45 AM	Part GT 239 } GT 240 }	7:45 AM	Same Same		
	C 241	8:10 AM	C 241	8:10 AM	Same		
	C 242	8:40 AM	C 242	8:40 AM	Same		
	GT 242	11:20 AM	GT 242	11:20 AM	Same		
	Y 223	6:45 PM	Y 223	6:45 PM	Same		
	A 100	7:20 PM	A 100	7:20 PM	Same		
	Part GT 242 } C 243 }	7:40 AM	Part GT 242 } C 243 }	7:20 AM		20 Min. 20 Min.	
4-16-40	Part GT 242 } C 244 }	11:15 AM	Part GT 242 } C 244 }	11:15 AM	Same Same		
	GT 244	11:50 AM	GT 244	11:50 AM	Same		
	C 245	12:15 PM	C 245	12:15 PM	Same		
	Y 224 } GT 245 }	1:15 PM	Y 224 } GT 245 }	1:15 PM	Same Same		
	END 4-14	5:15 PM	END 4-14	5:15 PM	Same		
		9:45 PM	A 101	7:30 PM	Same		



	GT 233	7:50 AM	GT 233	7:50 AM	Same		
	C 235	8:25 AM	C 235	8:25 AM	Same		
	GT 235	8:30 AM	GT 235	8:30 AM	Same		
	C 236	12:40 PM	C 236	12:40 PM	Same		
	Y 221	6:15 PM	Y 221	6:15 PM	Same		
	A 98	6:45 PM	A 98	6:45 PM	Same		
4-14-40	Part GT 236 } C 237	5:55 AM	Part GT 236 } C 237	5:05 AM		30 Min. 30 Min.	
	Part GT 236 } C 238	7:25 AM	Part GT 236 } C 238	7:30 AM		15 Min. 15 Min.	
	GT 238	8:15 AM	GT 238	7:35 AM		40 Min.	
	C 239	2:25 PM	C 239	1:55 PM		30 Min.	
	Y 222	7:00 PM	Y 222	7:05 PM			05 Min.
	A 99	7:30 PM	A 99	7:30 PM	Same		
4-15-40	Part GT 239 } C 240	6:55 AM	Part GT 239 } C 240	6:55 AM	Same Same		
	Part GT 239 } GT 240	7:45 AM	Part GT 239 } GT 240	7:45 AM	Same Same		
	C 241	8:10 AM	C 241	8:10 AM	Same		
	C 242	8:40 AM	C 242	8:40 AM	Same		
	GT 242	11:20 AM	GT 242	11:20 AM	Same		
	Y 223	6:45 PM	Y 223	6:45 PM	Same		
	A 100	7:20 PM	A 100	7:20 PM	Same		
4-16-40	Part GT 242 } C 243	7:40 AM	Part GT 242 } C 243	7:20 AM		30 Min. 30 Min.	
	Part GT 242 } C 244	11:15 AM	Part GT 242 } C 244	11:15 AM	Same Same		
	GT 244	11:50 AM	GT 244	11:50 AM	Same		
	C 245	12:15 PM	C 245	12:15 PM	Same		
	Y 224 } GT 245 }	1:15 PM	Y 224 } GT 245 }	1:15 PM	Same Same		
	SEE 4-14	5:15 PM	SEE 4-14	5:15 PM	Same		
	A 101	7:30 PM	A 101	7:30 PM	Same		
4-17-40	C 246	8:25 AM	C 246	8:25 AM	Same		
	C 247	9:45 AM	C 247	9:45 AM	Same		
	Y 225	6:00 PM	Y 225	6:00 PM	Same		
	A 102	8:25 PM	A 102	8:25 PM	Same		
4-18-40	GT 247	5:30 AM	GT 247	5:40 AM		10 Min.	
	C 248	5:55 AM	C 248	6:10 AM		15 Min.	
	C 249	7:05 AM	C 249	8:00 AM		55 Min.	
	C 250	10:55 AM	C 250	10:40 AM		15 Min.	

DATE (a)	PERMANENT BLOCK OR REGIMENT IDENTIFICATION (b)	ACTUAL ARRIVAL EL PASO (c)	PERMANENT BLOCK OR REGIMENT IDENTIFICATION (d)	REDETERMINED ARRIVAL EL PASO (e)	OPERATIONS BASED AS ACTUAL (f)	REDETERMINED IN ADVANCE OF ACTUAL (g)	REDETERMINED LATER THAN ACTUAL (h)
4-18-40	Y 286	5:35 PM	Y 286	5:15 PM		20 Min.	
	A 283	7:40 PM	A 283	7:30 PM		20 Min.	
4-19-40	G 251 Part of 250	5:50 AM	G 251 Part of 250	5:35 AM			05 Min. 05 Min.
	Part of 250 G 252	6:40 AM	Part of 250 G 252	6:40 AM	Run		
	GT 252	7:30 AM	GT 252	7:30 AM	Run		
	G 253	11:20 AM	G 253	11:20 AM	Run		
	Y 287	5:20 PM	Y 287	5:20 PM	Run		
	A 284	9:20 PM	A 284	9:20 PM	Run		
4-20-40	Part of 253 G 254	5:30 AM	Part of 253 G 254	5:30 AM	Run		
	Part of 253 G 255	7:00 AM	Part of 253 G 255	7:00 AM	Run		
	G 256	8:30 AM	G 256	8:30 AM	Run		
	GT 256	10:25 AM	GT 256	10:25 AM	Run		
	Y 288	6:05 PM	Y 288	6:05 PM	Run		
	A 285	6:45 PM	A 285	6:45 PM	Run		
4-21-40	Part of 256 G 257	5:35 AM	Part of 256 G 257	5:35 AM	Run		
	Part of 256 G 258	6:20 AM	Part of 256 G 258	6:20 AM	Run		
	GT 258	6:25 AM	GT 258	6:25 AM	Run		
	G 259	9:45 AM	G 259	9:45 AM	Run		
	GT 259	11:20 AM	GT 259	11:20 AM	Run		
	Y 289	7:30 PM	Y 289	6:50 PM		20 Min.	
	A 286	8:20 PM	A 286	7:55 PM		25 Min.	
4-22-40	GT 259	3:30 AM	GT 259	3:30 AM	Run		
	G 260	5:50 AM	G 260	5:50 AM	Run		
	G 261	7:00 AM	G 261	6:40 AM		20 Min.	
	G 262	8:05 AM	G 262	8:05 AM	Run		
	GT 262	9:35 AM	GT 262	9:35 AM	Run		
	Y 290	6:10 PM	Y 290	6:10 PM	Run		
	A 287	6:15 PM	A 287	6:15 PM	Run		
4-23-40	Part of 264 G 263	8:30 AM	Part of 264 G 263	8:30 AM	Run		
	Part of 264 GT 263	11:40 AM	Part of 264 GT 263	11:40 AM	Run		
	G 265	12:35 PM	G 265	12:35 PM	Run		
	GT 265	12:40 PM	GT 265	12:40 PM	Run		
	A 288 Y 291	8:25 PM	A 288 Y 291	8:25 PM	Run		
4-24-40	G 266	5:15 AM	G 266	5:15 AM	Run		
	GT 266	5:35 AM	GT 266	5:35 AM	Run		

4-20-40	Y 227	5:20 PM	Y 227	5:20 PM	
	A 224	9:20 PM	A 224	9:20 PM	
	Part 6 GT 253) O 254	5:30 AM	Part 6 GT 253) O 254	5:30 AM	
	Part 6 GT 253) O 255	7:00 AM	Part 6 GT 253) O 255	7:00 AM	
	O 256	8:30 AM	O 256	8:30 AM	
	GT 256	10:25 AM	GT 256	10:25 AM	
	Y 228	6:05 PM	Y 228	6:05 PM	
	A 205	6:45 PM	A 205	6:45 PM	
	Part 6 GT 256) O 257	5:35 AM	Part 6 GT 256) O 257	5:35 AM	
	Part 6 GT 256) O 258	6:20 AM	Part 6 GT 256) O 258	6:20 AM	
4-21-40	GT 258	6:25 AM	GT 258	6:25 AM	
	O 259	9:45 AM	O 259	9:45 AM	
	GT 259	11:20 AM	GT 259	11:20 AM	
	Y 229	7:10 PM	Y 229	6:50 PM	20 Min.
	A 206	8:30 PM	A 206	7:55 PM	25 Min.
	GT 259	3:30 AM	GT 259	3:30 AM	
	O 260	5:30 AM	O 260	5:30 AM	
	O 261	7:00 AM	O 261	6:40 AM	20 Min.
	O 262	8:05 AM	O 262	8:05 AM	
	GT 262	9:35 AM	GT 262	9:35 AM	
4-22-40	Y 230	6:10 PM	Y 230	6:10 PM	
	A 207	6:15 PM	A 207	6:15 PM	
	Part 6 O 264) O 263	8:30 AM	Part 6 O 264) O 263	8:30 AM	
	Part 6 O 264) GT 262	11:40 AM	Part 6 O 264) GT 262	11:40 AM	
	O 265	12:35 PM	O 265	12:35 PM	
	GT 265	12:40 PM	GT 265	12:40 PM	
	A 208) Y 231	8:25 PM	A 208) Y 231	8:25 PM	
	O 266	5:15 AM	O 266	5:15 AM	
	GT 266	5:55 AM	GT 266	5:55 AM	
	O 267	10:35 AM	O 267	10:15 AM	20 Min.
4-23-40	Y 232	6:10 PM	Y 232	6:10 PM	
	GT 267	6:30 AM	GT 267	6:30 AM	
	O 268	6:45 AM	O 268	6:45 AM	
	O 269	8:30 AM	O 269	7:40 AM	1 Hr. 10 Min.
	GT 269	9:30 AM	GT 269	9:30 AM	



DATE (a)	PERISHABLE BLOCK OR MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL EL PASO (c)	PERISHABLE BLOCK OR MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL EL PASO (e)	OPERATIONS SAME AS ACTUAL (f)	REDISPATCHED IN ADVANCE OF ACTUAL (g)	REDISPATCHED LATER THAN ACTUAL (h)
4-25-40	Y 233	5:20 PM	Y 233	5:20 PM	Same		
	N 29	7:30 PM	N 29	7:30 PM	Same		
4-26-40	C 270	6:20 AM	C 270	6:20 AM	Same		
	CYA 269	8:55 AM	CYA 269	7:25 AM		1 Hr. 30 Min.	
	C 271	9:15 AM	C 271	8:50 AM		25 Min.	
	CY 271	10:45 AM	CY 271	9:40 AM		1 Hr. 05 Min.	
	C 272	10:55 AM	C 272	10:55 AM	Same		
	CY 272	11:20 AM	CY 272	11:00 AM		20 Min.	
	Y 235	7:30 PM	Y 235	7:30 PM	Same		
4-27-40	Y 234	7:40 PM	Y 234	7:40 PM	Same		
	CYA 272	5:10 AM	CYA 272	4:10 AM		60 Min.	
	C 273	7:30 AM	C 273	7:30 AM	Same		
	C 274	7:40 AM	C 274	7:40 AM	Same		
	CY 274	10:25 AM	CY 274	10:25 AM	Same		
	C 275	10:50 AM	C 275	10:50 AM	Same		
	CY 275	11:10 AM	CY 275	11:00 AM		10 Min.	
	Y 236	6:20 PM	Y 236	5:40 PM		40 Min.	
	Y 237	6:35 PM	Y 237	5:55 PM		40 Min.	
4-28-40	CYA 275	6:15 AM	CYA 275	6:15 AM	Same		
	C 276	6:45 AM	C 276	6:45 AM	Same		
	C 277	8:55 AM	C 277	8:55 AM	Same		
	C 278	11:05 AM	C 278	10:35 AM		30 Min.	
	CY 278	11:35 AM	CY 278	11:35 AM	Same		
	Y 238	5:15 PM	Y 238	5:15 PM	Same		
	N 20	7:05 PM	N 20	7:05 PM	Same		
4-29-40	CYA 278	4:40 AM	CYA 278	4:40 AM	Same		
	C 279	5:20 AM	C 279	5:20 AM	Same		
	C 280	6:10 AM	C 280	6:10 AM	Same		
	C 281	10:35 AM	C 281	8:40 AM		1 Hr. 55 Min.	
	CY 281	10:50 AM	CY 281	9:30 AM		1 Hr. 20 Min.	
	Y 239	5:30 PM	Y 239	5:30 PM	Same		
4-30-40	CYA 281	3:55 AM	CYA 281	3:55 AM	Same		
	C 282	5:55 AM	C 282	5:40 AM		15 Min.	
	C 283	7:10 AM	C 283	7:10 AM	Same		
	CY 283	7:30 AM	CY 283	7:30 AM	Same		
	Y 240	6:45 PM	Y 240	6:45 PM	Same		
5-1-40	CYA 283	5:00 AM	CYA 283	5:00 AM	Same		

Defendant's Exhibit No. 238 (Witness Sines)  
Jan. 30, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

ARRIVAL TIME AT YUMA, ARIZONA  
OF "SSW" AND "GBW" WESTWARD MANIFEST TRAINS  
ACTUAL OPERATION COMPARED WITH REDISPATCHED  
OPERATION, OBSERVING 70-CAR RESTRICTION AND  
USING PRESENT POWER AND SHORT SIDINGS.

<u>MONTH OF APRIL, 1940</u>		
(1)	NUMBER OF TRAINS ARRIVING YUMA - ACTUAL, . . . . .	89
(2)	NUMBER OF TRAINS ARRIVING YUMA - REDISPATCHED, . . . . .	89
(3)	NUMBER OF BLOCKS AND MANIFEST SECTIONS INVOLVED, . . . . .	96
(4)	NUMBER OF REDISPATCHED BLOCKS ARRIVING YUMA -	
	(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	82
	(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	8
	(c) LATER THAN ACTUAL BLOCKS, . . . . .	6
(5)	TOTAL TIME -	
	(a) IN ADVANCE OF ACTUAL, . . . . .	4 HOURS 10 MINUTES
	(b) LATER THAN ACTUAL, . . . . .	1 HOUR 15 MINUTES
(6)	AVERAGE TIME OF 8 BLOCKS IN ADVANCE OF ACTUAL, . . . . .	31 MINUTES
(7)	AVERAGE TIME OF 6 BLOCKS LATER THAN ACTUAL, . . . . .	13 MINUTES

SSW = SUNSET WEST MANIFEST

GBW = GOLD RAIL WEST MANIFEST

APRIL 1940

DATE (a)	MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL TIME (c)	MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL TIME (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	REDISPATCHED SAME AS ACTUAL (h)
5	SEN 4 SEN 1-3 SEN 2-3 SEN 3-3	3:45 AM 5:45 AM 6:20 AM 10:45 AM	SEN 4 SEN 1-3 SEN 2-3 SEN 3-3	3:45 AM 5:45 AM 6:20 AM 10:45 AM			
6	SEN 5 SEN 1-1 SEN 2-1 SEN 3-1	6:20 AM 6:35 AM 7:15 AM 10:35 AM	SEN 5 SEN 1-1 SEN 2-1 SEN 3-1	6:20 AM 6:35 AM 7:15 AM 10:35 AM			
7	SEN 6 SEN 1-3 SEN 2-3	6:30 AM 6:40 AM 9:00 AM	SEN 6 SEN 1-3 SEN 2-3	6:30 AM 6:40 AM 9:00 AM			
8	SEN 7 SEN 1-1 SEN 2-1 SEN 3-1	6:00 AM 7:35 AM 9:15 AM 9:25 AM	SEN 7 SEN 1-1 SEN 2-1 SEN 3-1	5:30 AM 7:35 AM 9:15 AM 9:25 AM	30 Mins.		
9	SEN 1-1 SEN 2-1 SEN 3-1 SEN 4-1 SEN 5-1	4:25 AM 5:45 AM 10:45 AM 11:55 AM	SEN 1-1 SEN 2-1 SEN 3-1 SEN 4-1 SEN 5-1	4:00 AM 5:55 AM 9:45 AM 11:35 AM	25 Mins. 60 Mins. 20 Mins. 20 Mins.	20 Mins.	
10	SEN 9 SEN 1-1 SEN 2-1 SEN 3-1	2:55 AM 5:35 AM 6:40 AM 8:20 AM	SEN 9 SEN 1-1 SEN 2-1 SEN 3-1	2:55 AM 5:45 AM 6:40 AM 7:50 AM	20 Mins.	10 Mins.	
11	SEN 1-1 SEN 2-1 SEN 3-1	5:05 AM 6:20 AM 7:20 AM	SEN 1-1 SEN 2-1 SEN 3-1	5:05 AM 6:20 AM 7:20 AM			
12	SEN 11 SEN 1-1 SEN 2-1 SEN 3-1	3:30 AM 6:20 AM 7:30 AM	SEN 11 SEN 1-1 SEN 2-1 SEN 3-1	3:30 AM 6:20 AM 7:30 AM			
13	SEN 12 SEN 1-1 SEN 2-1 SEN 3-1	6:20 AM 8:15 AM 9:55 AM	SEN 12 SEN 1-1 SEN 2-1 SEN 3-1	6:20 AM 8:15 AM 9:55 AM			
14	SEN 13 SEN 1-1 SEN 2-1 SEN 3-1	3:45 AM 5:20 AM 6:25 AM	SEN 13 SEN 1-1 SEN 2-1 SEN 3-1	3:45 AM 5:20 AM 6:25 AM			
15	SEN 14 SEN 1-1 SEN 2-1 SEN 3-1	5:40 AM 6:50 AM 7:25 AM	SEN 14 SEN 1-1 SEN 2-1 SEN 3-1	5:40 AM 6:50 AM 7:25 AM			
16	SEN 15 SEN 1-1 SEN 2-1 SEN 3-1	5:45 AM 6:15 AM 6:45 AM 9:05 AM	SEN 15 SEN 1-1 SEN 2-1 SEN 3-1	5:45 AM 6:15 AM 6:45 AM 9:05 AM			
17	SEN 16 SEN 1-1 SEN 2-1 SEN 3-1	5:40 AM 8:25 AM 9:40 AM	SEN 16 SEN 1-1 SEN 2-1 SEN 3-1	5:40 AM 8:25 AM 9:45 AM		5 Mins.	
18	SEN 17 SEN 1-1 SEN 2-1 SEN 3-1	4:15 AM 6:05 AM 9:30 AM	SEN 17 SEN 1-1 SEN 2-1 SEN 3-1	4:15 AM 6:05 AM 9:45 AM		15 Mins.	
19	SEN 18 SEN 1-1 SEN 2-1 SEN 3-1	3:20 AM 6:00 AM 9:35 AM	SEN 18 SEN 1-1 SEN 2-1 SEN 3-1	3:35 AM 6:00 AM 9:35 AM		15 Mins.	



APRIL 1940

DATE (a)	MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL TIME (c)	MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL TIME (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	REDISPATCHED SAME AS ACTUAL (h)
20	20 19 20 19 20 19 20 19 20 19	6:00 AM 6:30 AM 7:30 AM 10:00 AM	(20 19) (20 19) (20 19) (20 19) (20 19)	6:00 AM 6:30 AM 7:30 AM 10:00 AM			Same Same Same Same Same
21	21 20 21 20 21 20	4:10 AM 5:10 AM 9:05 AM	20 20 20 19 20 19	4:10 AM 5:10 AM 9:05 AM			Same Same Same
22	22 19 22 19 22 19 22 19	2:30 AM 5:30 AM 8:15 AM 1:30 PM	20 19 20 19 20 19 20 19	2:30 AM 5:30 AM 8:15 AM 1:30 PM		20 Mins.	Same Same Same Same
23	23 23 23 23 23 23	2:35 AM 7:55 AM 9:35 AM	20 23 20 23 20 23	2:35 AM 7:55 AM 9:35 AM			Same Same Same
24	24 23 24 23 24 23 24 23	4:05 AM 6:10 AM 6:55 AM 7:35 AM	20 23 20 23 20 23 20 23	4:05 AM 6:10 AM 6:55 AM 7:35 AM			Same Same Same Same
25	25 23 25 23 25 23	3:25 AM 5:45 AM 7:05 AM	20 23 20 23 20 23	3:25 AM 5:45 AM 7:05 AM			Same Same Same
26	26 23 26 23 26 23 26 23	5:40 AM 6:00 AM 7:30 AM	20 23 20 23 (20 23) (20 23)	5:40 AM 6:00 AM 7:30 AM			Same Same Same Same
27	27 23 27 23 27 23 27 23	5:50 AM 6:00 AM 7:20 AM	(20 23) (20 23) 20 23 20 23	5:50 AM 6:00 AM 7:20 AM			Same Same Same Same
28	28 23 28 23 28 23	4:35 AM 6:20 AM 6:50 AM	20 27 20 27 20 27	3:30 AM 6:20 AM 6:40 AM	65 Mins. 10 Mins.		Same Same Same
29	29 23 29 23 29 23 29 23	3:10 AM 5:45 AM 7:05 AM 9:10 AM	20 23 20 23 20 23 20 23	3:10 AM 5:45 AM 7:05 AM 9:10 AM			Same Same Same Same
30	30 23 30 23 30 23 30 23	5:50 AM 6:20 AM 7:55 AM 9:00 AM	20 23 20 23 20 23 20 23	5:50 AM 6:20 AM 7:55 AM 9:00 AM			Same Same Same Same

**Defendant's Exhibit No. 239 (Witness Sines)**  
**Jan. 30, 1941**

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

REDISPATCH STUDY WAGE DATA,  
TUMA, ARIZONA TO EL PASO, TEXAS  
FOR PERIOD APRIL 4 TO APRIL 30, 1940.  
ACTUAL OPERATION COMPARED WITH REDISPATCHED OPERATION  
OBSERVING 70 CAR RESTRICTION AND USING PRESENT POWER AND SHORT SIDINGS

	NO. OF TRAINS	TRAIN MILES	TRAINMEN'S WAGES			LOGO- MOTIVE MILES	EMPLOYEES' WAGES			TOTAL WAGES		
			BASIC	VARIABLE	TOTAL		BASIC	VARIABLE	TOTAL	BASIC	VARIABLE	TOTAL
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
<b><u>NORTH LINE</u></b>												
(1) TUMA - GILA	309	49,077	\$13,439.66	\$1,345.62	\$14,885.28	54,222	\$ 8,772.06	\$ 949.22	\$ 9,721.28	\$ 22,211.72	\$ 2,094.84	\$ 24,306.56
REDISPATCHED	377	48,371	12,335.33	1,092.51	13,427.84	49,155	7,944.33	896.93	8,841.26	20,279.66	1,979.44	22,259.10
ACTUAL	22	2,708	1,104.33	63.12	1,167.45	5,067	685.73	52.29	738.02	1,632.06	115.40	1,747.46
INCREASE FOR PERIOD												
(2) GILA - TUCSON	408	51,568	13,980.34	1,222.88	15,203.22	61,449	10,449.75	988.76	11,438.51	\$4,400.12	\$2,211.64	\$6,611.76
REDISPATCHED	362	46,766	12,984.75	1,156.28	14,141.03	56,757	9,795.30	934.91	10,730.21	\$2,280.05	\$2,091.19	\$4,371.24
ACTUAL	22	2,812	995.59	66.60	1,062.19	4,692	684.48	53.85	738.33	1,620.07	180.45	1,800.52
INCREASE FOR PERIOD												
(3) TUCSON - LONGSBURG	433	70,529	20,747.19	908.67	21,655.86	101,644	17,173.39	1,076.03	18,249.42	37,920.58	1,984.70	39,905.28
REDISPATCHED	412	67,318	19,559.30	888.54	20,447.84	96,708	16,718.63	1,088.51	17,807.14	36,277.93	1,997.05	38,274.98
ACTUAL	20	3,211	1,187.89	40.13	1,228.02	2,932	454.76	47.52	502.28	1,642.65	87.65	1,730.30
INCREASE FOR PERIOD												
(4) LONGSBURG-EL PASO (Through trains only)	378	54,134	13,169.73	1,887.90	15,057.63	56,385	9,070.15	1,236.74	10,306.89	22,239.88	2,124.64	24,364.52
REDISPATCHED	378	54,134	13,169.73	1,887.90	15,057.63	56,385	9,070.15	1,236.74	10,306.89	22,239.88	2,124.64	24,364.52
ACTUAL												
INCREASE FOR PERIOD												
(5) TOTAL NORTH LINE	1,614	227,322	61,306.92	5,186.07	66,492.99	273,700	45,465.38	4,250.73	49,716.11	106,772.30	9,412.82	116,185.12
REDISPATCHED	1,580	218,569	58,047.11	4,986.23	63,033.34	260,979	43,530.41	4,097.09	47,627.50	101,577.32	9,082.32	110,659.64
ACTUAL	64	8,753	3,259.81	199.84	3,459.65	12,721	1,934.97	153.64	2,088.61	5,194.98	323.50	5,518.48
INCREASE FOR PERIOD												
<b><u>SOUTH LINE</u></b>												
(6) TUCSON - DOUGLAS	71	8,623	2,598.48	356.67	2,955.15	9,613	1,786.20	390.42	2,176.62	4,384.66	747.29	5,131.95
REDISPATCHED	71	8,623	2,598.48	356.67	2,955.15	9,613	1,786.20	390.42	2,176.62	4,384.66	747.29	5,131.95
ACTUAL												
INCREASE FOR PERIOD												
(7) DOUGLAS - BISHOP JUNCTION	48	1,060	625.94	54.83	680.77	1,050	349.22	42.71	391.93	975.16	97.54	1,072.70
REDISPATCHED	48	1,060	625.94	54.83	680.77	1,050	349.22	42.71	391.93	975.16	97.54	1,072.70
ACTUAL												
INCREASE FOR PERIOD												
(8) DOUGLAS - EL PASO	57	12,426	3,068.55	250.32	3,318.87	12,644	2,202.25	178.13	2,380.38	5,270.60	428.45	5,699.05
REDISPATCHED	57	12,426	3,068.55	250.32	3,318.87	12,644	2,202.25	178.13	2,380.38	5,270.60	428.45	5,699.05
ACTUAL												
INCREASE FOR PERIOD												
(9) TOTAL SOUTH LINE	176	22,079	6,292.97	661.82	6,954.79	23,307	4,337.67	611.28	4,948.95	10,630.84	1,273.28	11,904.12
REDISPATCHED	176	22,079	6,292.97	661.82	6,954.79	23,307	4,337.67	611.28	4,948.95	10,630.84	1,273.28	11,904.12
ACTUAL												
INCREASE FOR PERIOD												
(10) SUMMARY	1,790	249,401	67,600.89	5,847.89	73,448.78	297,007	49,803.05	4,862.01	54,665.06	117,403.14	10,686.10	128,089.24
REDISPATCHED	1,726	240,696	62,347.62	5,657.25	68,004.87	284,686	47,688.08	4,708.35	52,396.43	112,217.00	10,360.60	122,577.60
ACTUAL	64	8,705	5,253.27	190.64	5,443.91	12,321	1,914.97	153.66	2,068.63	5,186.14	325.50	5,511.64
INCREASE FOR PERIOD												
(11) Railroad Retirement and Unemployment Insurance Tax: 5.94% Trains, 5.73% Engines					203.80				119.66			323.46
(12) GRAND TOTAL					3,486.01				2,088.31			5,574.32

Jan. 30, 1941

(Pacific Lines)

DURING PERIOD APRIL 4TH TO APRIL 30TH, 1940, INCLUSIVE  
ACTUAL OPERATION COMPARED WITH REDESPATCHED OPERATION,  
WITH NO RESTRICTIONS AND USING AC POWER AND LONG SIDING

ACTUAL											RECAPITULATION										
	50 AND LESS	51 TO 60	61 TO 70	71 TO 80	81 TO 90	91 TO 100	101 TO 110	111 TO 120	121 TO 130	TOTAL		50 AND LESS	51 TO 60	61 TO 70	71 TO 80	81 TO 90	91 TO 100	101 TO 110	111 TO 120	121 TO 130	TOTAL
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)		(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
TUMA - GILA (123 Miles)	EAST WEST TOTAL	6 2 8	20 34 54	137 89 226	7 13 20	4 19 23	1 45 46	- - -	- - -	175 202 377	6 1 7	9 4 13	23 25 48	18 18 36	24 51 75	33 25 58	17 14 31	3 6 9	1 18 19	134 162 296	
PER CENT OF TOTAL		2.12	14.32	59.95	5.31	6.10	12.20	-	-	100	2.37	4.39	16.21	12.16	25.34	19.60	10.47	3.04	6.42	100	
GILA - TUCSON (128 Miles)	EAST WEST TOTAL	10 3 13	18 84 42	135 104 239	11 6 17	4 25 29	1 41 42	- - -	- - -	179 203 382	6 1 7	10 2 12	14 16 30	22 19 41	20 65 85	42 25 67	17 7 24	2 9 11	1 17 18	134 161 295	
PER CENT OF TOTAL		3.40	11.00	62.56	4.45	7.59	11.00	-	-	100	2.37	4.07	10.17	13.90	28.81	22.71	8.14	3.73	6.10	100	
TUCSON - LORNSBURG (164 Miles East) (163 Miles West)	EAST WEST TOTAL	16 21 37	31 54 85	144 40 184	6 37 43	3 58 59	- 5 5	- - -	- - -	198 215 413	14 1 15	20 1 21	22 14 36	12 42 54	22 36 58	25 15 40	34 12 46	2 13 15	- 26 26	151 160 311	
PER CENT OF TOTAL		8.96	20.58	44.55	10.41	14.29	1.21	-	-	100	4.82	6.75	11.58	17.37	18.65	12.86	14.79	4.82	8.36	100	
LORNSBURG - EL PASO (148 Miles East) (149 Miles West)	EAST WEST TOTAL	23 2 25	26 34 60	112 72 184	8 4 12	8 4 12	10 70 80	1 4 5	- - -	188 190 378	36 - 36	13 5 18	22 29 51	11 15 26	19 45 64	26 25 51	32 12 44	6 9 15	- 29 29	165 169 334	
PER CENT OF TOTAL		6.61	15.87	48.68	3.17	3.18	21.17	1.32	-	100	10.78	5.39	15.27	7.79	19.16	15.27	13.17	4.49	8.68	100	
GRAND TOTAL TUMA - EL PASO		83	241	833	192	123	173	5	-	1,550	65	64	165	157	282	216	145	50	92	1,236	

RECAPITULATION				# One train departed Lordsburg with 71 cars; reduced to 70 cars at State Line.				RECAPITULATION			
TOTAL TRAINS OVER TO CARS	393	25.35%						TOTAL TRAINS OVER TO CARS	942	76.21%	
TOTAL TRAINS TO CARS AND UNDER	1,157	74.65%						TOTAL TRAINS TO CARS AND UNDER	279	23.79%	
TOTAL TRAINS	1,550	100.00%						TOTAL TRAINS	1,236	100.00%	

TUCSON - DOUGLAS (125 Miles East) (124 Miles West)	EAST WEST TOTAL	15 5 20	5 4 9	14 23 37	1 2 3	- 2 2	- - -	- - -	- - -	35 36 71	15 5 20	5 4 9	14 23 37	1 2 3	- 2 2	- - -	- - -	- - -	- - -	- - -	35 36 71
PER CENT OF TOTAL		28.16	12.68	52.11	4.23	2.82	-	-	-	100	28.16	12.68	52.11	4.23	2.82	-	-	-	-	-	100
DOUGLAS - EL PASO (217 Miles East) (216 Miles West)	EAST WEST TOTAL	26 3 29	2 3 5	1 14 15	- 5 5	5 2 7	1 1 2	- - -	- - -	29 28 57	26 3 29	2 3 5	1 14 15	- 5 5	5 2 7	1 1 2	- - -	- - -	- - -	- - -	29 28 57
PER CENT OF TOTAL		50.88	8.77	26.32	-	8.77	3.52	1.75	-	100	50.88	8.77	26.32	-	8.77	3.51	1.75	-	-	-	100
DOUGLAS & HERMAN JCT. (22 Miles)	EAST WEST TOTAL	1 - 1	2 4 6	20 12 32	- 8 8	1 - 1	- - -	- - -	- - -	24 24 48	1 - 1	2 4 6	20 12 32	- 8 8	1 - 1	- - -	- - -	- - -	- - -	- - -	24 24 48
PER CENT OF TOTAL		2.08	12.50	66.67	16.67	2.08	-	-	-	100	2.08	12.50	66.67	16.67	2.08	-	-	-	-	-	100
GRAND TOTAL TUCSON - EL PASO		50	20	84	11	8	2	1	-	176	50	20	84	11	8	2	1	-	-	-	176

RECAPITULATION				# - One train in each bracket (total 3) reduced to less than 70 cars east of Arizona State Line.				RECAPITULATION			
TOTAL TRAINS OVER TO CARS	32	12.50%						TOTAL TRAINS OVER TO CARS	22	12.50%	
TOTAL TRAINS TO CARS AND UNDER	154	87.50%						TOTAL TRAINS TO CARS AND UNDER	154	87.50%	
TOTAL TRAINS	176	100.00%						TOTAL TRAINS	176	100.00%	

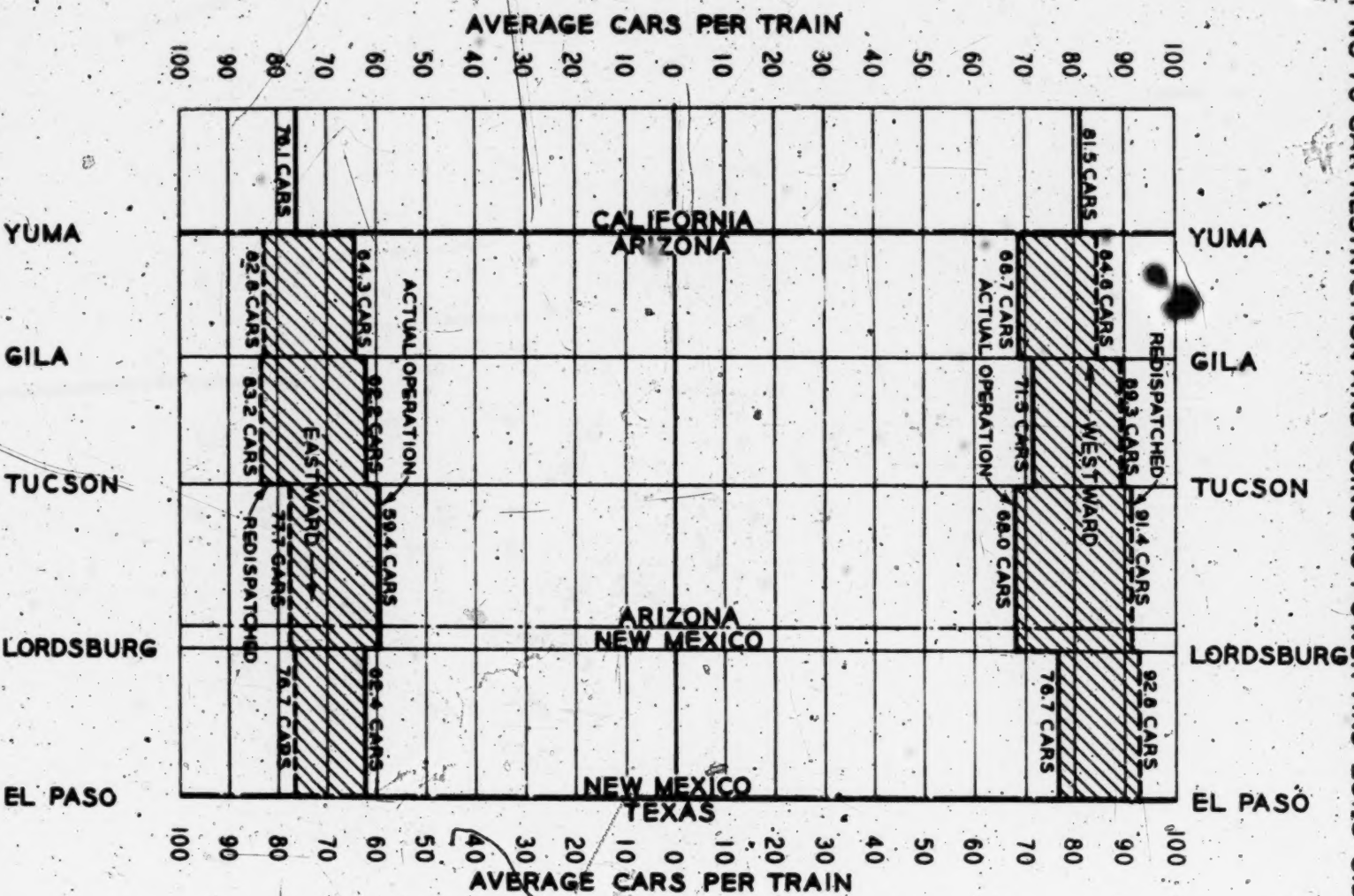


Defendant's Exhibit No. 241 (Witness Sines)  
Jan. 30, 1941

SOUTHERN PACIFIC COMPANY

### RELATIVE TRAIN LENGTHS

CALIFORNIA - ARIZONA - NEW MEXICO - TEXAS  
THROUGH AND LOCAL FREIGHT TRAINS  
OPERATING VIA YUMA, GILA, TUCSON, LORDSBURG AND EL PASO  
EXCLUDING STRAUSS TURNAROUND TRAINS  
BASED ON REDISPATCHING STUDY OF APRIL 1940  
WITH NO 70 CAR RESTRICTION AND USING AC POWER AND LONG SIDINGS



**Defendant's Exhibit No. 242 (Witness Sines)**  
**Jan. 30, 1941**

**SOUTHERN PACIFIC COMPANY**  
**(Pacific Lines)**

**RECEIPTS STUDY - OPERATING STATISTICS**  
**TUAM, ARIZONA TO EL PASO, TEXAS**  
**FOR PERIOD APRIL 4TH TO APRIL 30TH, 1940**  
**ACTUAL OPERATION COMPARED WITH UNRECEIPTED OPERATION,**  
**WITH NO RESTRICTIONS ALSO USING AS POWER AND LONG SINKING**

	NUMBER OF TRAINS (a)	TRAIN MILES (b)	OTHER LOCOMOTIVE MILES (c)	TOTAL LOCOMOTIVE MILES (d)	NUMBER OF CARS (e)	CARS PER TRAIN (f)
<b>NORTH LINE</b>						
<b>I - Tuam - Gila</b>						
Actual	377	46,371	2,704	49,125	25,123	64.6
Receipts	384	34,408	2,776	37,184	24,804	66.8
Decrease for period	81	9,963	8	9,971	(1) 319	17.8
<b>II - Gila - Tucson</b>						
Actual	328	48,764	7,991	56,755	25,643	67.1
Receipts	326	37,420	6,700	44,120	22,227	66.8
Decrease for period	2	11,344	1,291	12,635	(3) 116	19.4
<b>III - Tucson - Lordsburg</b>						
Actual	413	57,318	31,304	88,622	26,376	65.9
Receipts	311	30,648	17,928	48,576	22,340	66.8
Decrease for period	102	16,670	13,376	40,046	(3) 16	20.9
<b>IV - Lordsburg - El Paso (Through trains only)</b>						
Actual	376	54,134	251	54,385	24,310	69.6
Receipts	310	44,027	222	44,249	22,312	66.9
Decrease for period	66	10,107	29	9,808	(4)(1) 3	25.3
<b>V - El Paso - Stems (Turnaround trains only)</b>						
Actual	-	-	-	-	-	-
Receipts	24	420	-	420	1,057	(8) 28.1
Decrease for period	(1) 24	(1) 420	-	(1) 420	(1) 1,057	(8) 28.1
<b>VI - TOTAL NORTH LINE</b>						
Actual	1,860	212,809	42,380	255,189	105,428	66.7
Receipts	1,226	171,140	28,251	199,391	102,051	(8) 66.0
Decrease for period	634	41,669	14,129	45,798	(1) 409	(6) 18.3
<b>SOUTH LINE</b>						
<b>VII - Tucson - Douglas (Through trains only)</b>						
Actual	71	8,805	810	9,615	3,977	50.4
Receipts	71	8,803	810	9,613	3,977	50.4
Decrease for period	-	-	-	-	-	-
<b>VIII - Douglas - El Paso (Turnaround trains only)</b>						
Actual	48	1,080	-	1,080	3,171	66.1
Receipts	48	1,080	-	1,080	3,171	66.1
Decrease for period	-	-	-	-	-	-
<b>IX - Douglas - El Paso</b>						
Actual	57	12,426	218	12,644	2,734	68.0
Receipts	57	12,426	218	12,644	2,734	68.0
Decrease for period	-	-	-	-	-	-
<b>X - TOTAL SOUTH LINE</b>						
Actual	176	22,879	1,028	23,907	9,482	(7) 49.3
Receipts	176	22,879	1,028	23,907	9,482	(7) 49.3
Decrease for period	-	-	-	-	-	-
<b>XI - TOTAL NORTH AND SOUTH LINES</b>						
Actual	1,736	240,688	43,408	284,096	114,910	(8) 65.4
Receipts	1,412	193,419	29,279	222,698	112,043	(8) 61.6
Decrease for period	324	47,269	14,129	61,398	(1) 409	(8) 18.2

I - Indicates Increase

- (1) Yuma - Gila District: Decrease of 156 engine water cars east, and 167 west; increase of four deadhead cabooses east. Total decrease of 319 cars on the redispached trains.
- (2) Gila - Tucson District: Decrease of 112 engine water cars and 4 deadhead cabooses.
- (3) Tucson-Lordsburg District: Decrease of 14 deadhead cabooses east and 2 west. Total decrease of 16 cars on the redispached trains.
- (4) Lordsburg-El Paso District: Increase of 2 deadhead cabooses east, and 1 west. Total increase of 3 cars on the redispached trains.
- (5) El Paso - Strains: Average cars per train (redispach) computed for Strains turnarounds by omitting 12 trains in the eastward direction as these trains handled some of the 1,057 cars, (all of these cars moved westward).
- (6) Average cars per train (redispach) computed omitting 24 El Paso - Strains turnaround trains and 1,057 cars handled by these trains.
- (7) Average cars per train computed for total south line omitting 48 Douglas - Bisbee Jet. turnaround trains and 3,171 cars handled by these trains.
- (8) Average cars per train for total north and south lines omitting Strains, and Douglas - Bisbee Jet. turnaround trains and cars handled by these trains.

ACTUAL	No Strains turnarounds	
	<u>48 Douglas-Bisbee Jet. turnarounds with</u>	<u>3,171 cars</u>
	Total 48 trains omitted	3,171 cars omitted
REDISPATCH	24 Strains turnarounds with	1,057 cars
	<u>48 Douglas-Bisbee Jet. turnarounds with</u>	<u>3,171 cars</u>
	Total 72 trains omitted	4,228 cars omitted



**Defendant's Exhibit No. 243 (Witness Sines)  
Jan. 30, 1941**

**INTERVIEW REPORT SUMMARY  
(FURNISHING SINES)**

ARRIVAL TIME AT EL PASO, TEXAS  
OF FIRST BLOCKS AND RAILROAD SECTION  
APRIL 28 TO MAY 30, 1940

REPRODUCED AS FOLLOWS

**SUMMARY**

(1) NUMBER OF TRAINS ARRIVING EL PASO - ACTUAL	140
(2) NUMBER OF TRAINS ARRIVING EL PASO - REPRODUCED	130
(3) NUMBER OF BLOCKS AND RAILROAD SECTION INVOLVED - ACTUAL	105
(4) NUMBER OF BLOCKS AND RAILROAD SECTION INVOLVED - REPRODUCED	179
(5) NUMBER OF REPRODUCED BLOCKS ARRIVING EL PASO -	
(a) AT SAME TIME AS ACTUAL BLOCKS	20
(b) IN ADVANCE OF ACTUAL BLOCKS	105
(c) LATER THAN ACTUAL BLOCKS	60
(6) TOTAL TIME -	
(a) IN ADVANCE OF ACTUAL	79 HRS. 15 MIN.
(b) LATER THAN ACTUAL	48 HRS. 00 MIN.
(7) AVERAGE TIME OF 105 BLOCKS IN ADVANCE OF ACTUAL (REPRODUCED)	36
(8) AVERAGE TIME OF 60 BLOCKS LATER THAN ACTUAL (REPRODUCED)	48

A - ARRIVAL REPRODUCED BLOCK  
C - CLOSURE REPRODUCED BLOCK  
Y - YARD REPRODUCED BLOCK  
CT - CLOSURE CLOSURE ON THE BLOCK OF CLOSURE CLOSURE  
CR - CLOSURE CLOSURE CLOSURE ON THE BLOCK OF CLOSURE CLOSURE  
H - HOURS REPRODUCED  
MS - MINUTES REPRODUCED

APRIL 1940

DATE (a)	MEMORANDUM BLANK OR EXHIBIT IDENTIFICATION (b)	ACTUAL ARRIVAL EL PASO (c)	MEMORANDUM BLANK OR EXHIBIT IDENTIFICATION (d)	MEMORANDUM ARRIVAL EL PASO (e)	MEMORANDUM IN ADVANCE OF ACTUAL (f)	MEMORANDUM LATER THAN ACTUAL (g)	OPERATIONS SAME AS ACTUAL (h)
4	A 87 A 88	7:35 PM 9:30 PM	A 87 A 88	7:35 PM 9:10 PM	20 Min.		Same
5	(C 211) C 212 C 213 C 214 CT 214 Y 213 A 99 A 90	7:50 AM 8:00 AM 11:55 AM 1:25 PM 6:40 PM 8:25 PM 9:00 PM	CT 211 C 212 C 213 (C 214) CT 214 Y 213 (A 99) A 90	5:55 AM 6:00 AM 7:50 AM 12:30 PM 9:05 PM 9:25 PM	1 Hr. 55 Min. 1 Hr. 30 Min. 10 Min. 1 Hr. 05 Min.	25 Min. 2 Hr. 25 Min. 40 Min. 25 Min.	
6	CT 214 C 215 C 216 C 217 Y 214 A 91	7:30 AM 7:40 AM 8:50 AM 12:30 PM 5:00 PM 7:10 PM	CT 214 C 215 C 216 C 217 Y 214 A 91	6:50 AM 7:35 AM 8:50 AM 12:15 PM 7:20 PM 7:50 PM	40 Min. 05 Min. 15 Min.	2 Hr. 20 Min. 40 Min.	Same
7	CT 217 C 218 C 219 C 220 Y 215 A 92 H 17	5:05 AM 10:40 AM 11:45 AM 2:15 PM 6:05 PM 8:45 PM 9:25 PM	CT 217 C 218 C 219 C 220 Y 215 (A 92) H 17	4:25 AM 7:20 AM 8:00 AM 12:55 PM 6:05 PM 9:40 PM	40 Min. 3 Hr. 20 Min. 3 Hr. 45 Min. 1 Hr. 20 Min.	55 Min. 15 Min.	Same
8	CT 220 C 221 C 222 C 223 CT 223 Y 216 A 93	8:25 AM 9:40 AM 11:45 AM 12:15 PM 1:40 PM 6:55 PM 7:00 PM	CT 220 C 221 C 222 (C 223) CT 223 Y 216 (A 93)	7:20 AM 8:15 AM 9:40 AM 12:15 PM 7:35 PM	1 Hr. 05 Min. 1 Hr. 25 Min. 2 Hr. 05 Min. 1 Hr. 25 Min.	40 Min. 35 Min. 05 Min.	Same
9	CT 223 C 224 C 225 C 226 A 94 Y 217	6:30 AM 8:15 AM 11:15 AM 12:35 PM 8:00 PM 9:20 PM	(Part CT 223) C 224 (Part CT 223) C 226 A 94 Y 217	6:15 AM 8:20 AM 12:55 PM 8:30 PM 8:15 PM	2 Hr. 00 Min. 2 Hr. 53 Min. 1 Hr. 05 Min.	2 Hr. 10 Min.	Same Same
10	CT 224 C 227 (Y 218) (A 95)	6:00 AM 7:45 AM 7:25 PM	(CT 224) C 227 Y 218 (A 95)	7:55 AM	30 Min. 30 Min.	1 Hr. 55 Min. 10 Min.	
11	H 18 CT 227 C 228 C 229 C 230 Y 219 A 96	1:30 AM 7:00 AM 7:05 AM 8:40 AM 9:55 AM 6:40 PM 6:55 PM	H 18 (CT 227) C 228 C 229 C 230 Y 219 A 96	1:00 AM 6:30 AM 8:40 AM 10:45 AM 6:35 PM 6:55 PM	10 Min. 10 Min. 15 Min. 05 Min.	30 Min.	Same Same
12	CT 230 C 231 C 232 CT 232 C 233 Y 220 A 97	8:45 AM 8:50 AM 10:10 AM 11:25 AM 1:00 PM 6:30 PM 7:25 PM	CT 230 C 231 C 232 (CT 232) C 233 Y 220 A 97	7:25 AM 7:40 AM 9:00 AM 12:55 PM 6:10 PM 7:25 PM	1 Hr. 20 Min. 1 Hr. 10 Min. 1 Hr. 10 Min. 2 Hr. 25 Min. 05 Min. 40 Min.		Same
13	C 234 CT 233 C 235 CT 235 C 236 Y 221 A 98	6:40 AM 7:50 AM 8:25 AM 8:30 AM 12:40 PM 6:15 PM 6:45 PM	(C 234) CT 233 C 235 CT 235 C 236 Y 221 A 98	6:30 AM 7:35 AM 1:05 PM 6:35 PM	10 Min. 15 Min. 50 Min. 55 Min.	25 Min. 30 Min.	
14	(Part CT 236) (Part C 237) (Part CT 236) C 238 CT 238 C 239 Y 222 A 99	5:55 AM 7:25 AM 8:15 AM 2:25 PM 7:00 PM 7:30 PM	(CT 236) C 237 C 238 CT 238 C 239 Y 222 A 99	5:05 AM 6:30 AM 2:35 PM 6:30 PM 7:00 PM	30 Min. 30 Min. 2 Hr. 20 Min. 55 Min. 1 Hr. 45 Min.	10 Min.	
15	(Part CT 239) (Part C 240) CT 239 CT 240 C 241	6:55 AM 7:45 AM 8:10 AM	(CT 239) C 240 CT 240 C 241	6:55 AM 7:10 AM	50 Min. 50 Min. 1 Hr. 00 Min.		Same Same

	C 214 Y 215 A 90	11:55 AM 12:00 PM 6:00 PM 6:00 PM	C 214 Y 215 A 90	12:30 PM 9:05 PM 9:25 PM	1 Hr. 05 Min. 40 Min. 05 Min.	25 Min. 1 Hr. 25 Min. 40 Min. 25 Min.	
6	C 214 C 215 C 216 C 217 Y 218 A 91	7:30 AM 7:40 AM 8:00 AM 12:30 PM 9:00 PM 7:30 PM	C 214 C 215 C 216 C 217 Y 218 A 91	6:30 AM 7:35 AM 8:50 AM 12:15 PM 7:20 PM 7:30 PM	40 Min. 05 Min. 15 Min.		Same
7	C 217 C 218 C 219 C 220 Y 221 A 92 H 17	9:05 AM 10:40 AM 11:45 AM 2:15 PM 4:05 PM 6:45 PM 9:25 PM	C 217 C 218 C 219 C 220 Y 221 A 92 H 17	4:25 AM 7:20 AM 8:00 AM 12:55 PM 6:05 PM 9:40 PM	40 Min. 3 Hr. 20 Min. 3 Hr. 45 Min. 1 Hr. 20 Min.		Same
8	C 220 C 221 C 222 C 223 Y 224 A 93	8:25 AM 9:40 AM 11:45 AM 12:15 PM 1:40 PM 6:55 PM 7:00 PM	C 220 C 221 C 222 C 223 Y 224 A 93	7:20 AM 8:15 AM 9:40 AM 12:15 PM 7:35 PM	1 Hr. 05 Min. 1 Hr. 25 Min. 2 Hr. 05 Min. 1 Hr. 25 Min.		Same
9	C 223 C 224 C 225 C 226 A 94 Y 227	6:30 AM 8:15 AM 11:15 AM 12:35 PM 8:00 PM 9:20 PM	(Part C 223) C 224 (Part C 223) C 225 C 226 A 94 Y 227	6:15 AM 8:20 AM 12:35 PM 6:00 PM 8:15 PM	2 Hr. 00 Min. 2 Hr. 53 Min. 1 Hr. 05 Min.	40 Min. 35 Min. 05 Min. 2 Hr. 10 Min.	Same Same
10	C 227 Y 228 A 95	6:00 AM 7:45 AM 7:25 PM	C 227 C 228 Y 228 A 95	7:55 AM (6:55 PM)	30 Min. 30 Min.	1 Hr. 55 Min. 10 Min.	
11	H 18 C 227 C 228 C 229 C 230 Y 231 A 96	1:30 AM 7:00 AM 7:05 AM 8:40 AM 9:55 AM 6:40 PM 6:55 PM	H 18 C 227 C 228 C 229 C 230 Y 231 A 96	1:00 AM 6:30 AM 8:40 AM 10:45 AM 6:55 PM	10 Min. 10 Min. 15 Min. 05 Min.	50 Min.	Same Same
12	C 230 C 231 C 232 C 233 Y 234 A 97	8:45 AM 8:30 AM 10:10 AM 11:25 AM 1:00 PM 6:50 PM 7:25 PM	C 230 C 231 C 232 C 233 Y 234 A 97	7:25 AM 7:40 AM 9:00 AM 12:55 PM 6:20 PM 7:25 PM	1 Hr. 20 Min. 1 Hr. 10 Min. 1 Hr. 10 Min. 2 Hr. 25 Min. 05 Min. 40 Min.		Same
13	C 234 C 235 C 236 C 237 Y 238 A 98	6:40 AM 7:50 AM 8:25 AM 8:30 AM 12:40 PM 6:25 PM 6:45 PM	C 234 C 235 C 236 C 237 Y 238 A 98	6:30 AM 7:35 AM 1:05 PM 6:35 PM	10 Min. 15 Min. 50 Min. 55 Min.	25 Min. 20 Min.	
14	(Part C 239) C 239 (Part C 239) C 240 C 241 Y 242 A 99	5:55 AM 7:25 AM 8:15 AM 2:25 PM 7:00 PM 7:30 PM	C 239 C 239 C 240 C 241 Y 242 A 99	5:05 AM 6:30 AM 2:35 PM 6:30 PM 7:00 PM	30 Min. 30 Min. 2 Hr. 20 Min. 55 Min. 1 Hr. 45 Min.	10 Min.	
15	(Part C 243) C 243 (Part C 243) C 244 C 245 Y 246 A 100	6:55 AM 7:45 AM 8:30 AM 8:40 AM 11:20 AM 6:45 PM 7:25 PM	C 243 C 243 C 244 C 245 Y 246 A 100	6:55 AM 7:10 AM (10:30 AM) 6:25 PM 7:00 PM	50 Min. 50 Min. 1 Hr. 00 Min. 50 Min. 20 Min. 20 Min.	1 Hr. 30 Min.	Same Same



DATE	REMARKS ON ARRIVAL (a)	ACTUAL ARRIVAL (b)	REMARKS ON DEPARTURE (c)	REMARKS ACTUAL (d)	REMARKS IN ARRIVAL OF ACTUAL (e)	REMARKS LATER THAN ACTUAL (f)	REMARKS SAME AS ACTUAL (g)
26	{ C 264 C 265 C 266 C 267 C 268 C 269 C 270 C 271 C 272 C 273 C 274 C 275 C 276 C 277 C 278 C 279 C 280 C 281 C 282 C 283 C 284 C 285 C 286 C 287 C 288 C 289 C 290 C 291 C 292 C 293 C 294 C 295 C 296 C 297 C 298 C 299 C 300 C 301 C 302 C 303 C 304 C 305 C 306 C 307 C 308 C 309 C 310 C 311 C 312 C 313 C 314 C 315 C 316 C 317 C 318 C 319 C 320 C 321 C 322 C 323 C 324 C 325 C 326 C 327 C 328 C 329 C 330 C 331 C 332 C 333 C 334 C 335 C 336 C 337 C 338 C 339 C 340 C 341 C 342 C 343 C 344 C 345 C 346 C 347 C 348 C 349 C 350 C 351 C 352 C 353 C 354 C 355 C 356 C 357 C 358 C 359 C 360 C 361 C 362 C 363 C 364 C 365 C 366 C 367 C 368 C 369 C 370 C 371 C 372 C 373 C 374 C 375 C 376 C 377 C 378 C 379 C 380 C 381 C 382 C 383 C 384 C 385 C 386 C 387 C 388 C 389 C 390 C 391 C 392 C 393 C 394 C 395 C 396 C 397 C 398 C 399 C 400 C 401 C 402 C 403 C 404 C 405 C 406 C 407 C 408 C 409 C 410 C 411 C 412 C 413 C 414 C 415 C 416 C 417 C 418 C 419 C 420 C 421 C 422 C 423 C 424 C 425 C 426 C 427 C 428 C 429 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596 C 597 C 598 C 599 C 600 C 601 C 602 C 603 C 604 C 605 C 606 C 607 C 608 C 609 C 610 C 611 C 612 C 613 C 614 C 615 C 616 C 617 C 618 C 619 C 620 C 621 C 622 C 623 C 624 C 625 C 626 C 627 C 628 C 629 C 630 C 631 C 632 C 633 C 634 C 635 C 636 C 637 C 638 C 639 C 640 C 641 C 642 C 643 C 644 C 645 C 646 C 647 C 648 C 649 C 650 C 651 C 652 C 653 C 654 C 655 C 656 C 657 C 658 C 659 C 660 C 661 C 662 C 663 C 664 C 665 C 666 C 667 C 668 C 669 C 670 C 671 C 672 C 673 C 674 C 675 C 676 C 677 C 678 C 679 C 680 C 681 C 682 C 683 C 684 C 685 C 686 C 687 C 688 C 689 C 690 C 691 C 692 C 693 C 694 C 695 C 696 C 697 C 698 C 699 C 700	7:40 AM 11:40 AM 11:50 AM 12:15 PM 1:25 PM 5:25 PM 7:30 PM	C 264 C 265 C 266 C 267 C 268 C 269 C 270 C 271 C 272 C 273 C 274 C 275 C 276 C 277 C 278 C 279 C 280 C 281 C 282 C 283 C 284 C 285 C 286 C 287 C 288 C 289 C 290 C 291 C 292 C 293 C 294 C 295 C 296 C 297 C 298 C 299 C 300 C 301 C 302 C 303 C 304 C 305 C 306 C 307 C 308 C 309 C 310 C 311 C 312 C 313 C 314 C 315 C 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27	{ C 266 C 267 C 268 C 269 C 270 C 271 C 272 C 273 C 274 C 275 C 276 C 277 C 278 C 279 C 280 C 281 C 282 C 283 C 284 C 285 C 286 C 287 C 288 C 289 C 290 C 291 C 292 C 293 C 294 C 295 C 296 C 297 C 298 C 299 C 300 C 301 C 302 C 303 C 304 C 305 C 306 C 307 C 308 C 309 C 310 C 311 C 312 C 313 C 314 C 315 C 316 C 317 C 318 C 319 C 320 C 321 C 322 C 323 C 324 C 325 C 326 C 327 C 328 C 329 C 330 C 331 C 332 C 333 C 334 C 335 C 336 C 337 C 338 C 339 C 340 C 341 C 342 C 343 C 344 C 345 C 346 C 347 C 348 C 349 C 350 C 351 C 352 C 353 C 354 C 355 C 356 C 357 C 358 C 359 C 360 C 361 C 362 C 363 C 364 C 365 C 366 C 367 C 368 C 369 C 370 C 371 C 372 C 373 C 374 C 375 C 376 C 377 C 378 C 379 C 380 C 381 C 382 C 383 C 384 C 385 C 386 C 387 C 388 C 389 C 390 C 391 C 392 C 393 C 394 C 395 C 396 C 397 C 398 C 399 C 400 C 401 C 402 C 403 C 404 C 405 C 406 C 407 C 408 C 409 C 410 C 411 C 412 C 413 C 414 C 415 C 416 C 417 C 418 C 419 C 420 C 421 C 422 C 423 C 424 C 425 C 426 C 427 C 428 C 429 C 430 C 431 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657 C 658 C 659 C 660 C 661 C 662 C 663 				

	Part C 243 C 243 OT 244 C 245 Y 244 C 245 A 101	7:40 AM 11:45 AM 11:50 AM 12:15 PM 1:15 PM 5:15 PM 7:30 PM	C 243 C 243 C 244 OT 244 C 245 Y 244 C 245 A 101	6:45 AM 6:25 AM 11:40 AM 12:05 PM 5:20 PM 8:25 PM	1 Hr. 25 Min. 1 Hr. 15 Min. 5 Hr. 00 Min. 10 Min. 10 Min. 1 Hr. 10 Min. 1 Hr. 10 Min.	25 Min. 05 Min. 55 Min.	
17	C 246 C 247 C 247 Y 247 A 102	8:25 AM 9:45 AM 6:00 PM 8:25 PM	C 246 C 247 C 247 Y 247 A 102	8:05 AM 11:45 AM 9:35 AM 5:55 PM 8:00 PM	20 Min. 10 Min. 05 Min. 25 Min.	1 Hr. 00 Min.	
18	OT 247 C 248 C 249 C 249 Y 248 A 103	5:30 AM 5:55 AM 7:05 AM 10:55 AM 5:35 PM 7:40 PM	OT 247 C 248 C 249 C 249 Y 248 A 103	4:45 AM 6:20 AM 7:05 AM 9:25 AM 5:55 PM 7:40 PM	45 Min. 1 Hr. 30 Min.	15 Min. 20 Min.	Same
19	C 251 C 251 OT 250 C 252 OT 252 C 253 Y 257 A 104	5:50 AM 6:40 AM 7:10 AM 11:20 AM 5:20 PM 9:20 PM	C 251 C 251 OT 250 C 252 OT 252 C 253 Y 257 A 104	6:10 AM 5:05 AM 6:40 AM 11:00 AM 5:20 PM 9:20 PM	45 Min. 1 Hr. 35 Min. 30 Min. 20 Min.	20 Min.	Same
20	Part C 253 C 254 C 253 C 254 C 254 Y 253 A 105	5:30 AM 7:00 AM 8:10 AM 10:25 AM 6:05 PM 6:45 PM	C 253 C 254 C 254 C 254 Y 253 A 105	6:30 AM 7:20 AM 9:40 AM 6:00 PM 6:45 PM	10 Min. 45 Min. 05 Min.	1 Hr. 20 Min. 1 Hr. 30 Min. 20 Min. 1 Hr. 30 Min.	Same
21	Part C 256 C 257 C 256 C 257 C 258 C 259 C 259 Y 257 A 106	5:35 AM 6:20 AM 6:25 AM 9:45 AM 11:20 AM 7:10 PM 8:20 PM	C 256 C 257 C 258 C 258 OT 258 C 259 Y 257 A 106	6:15 AM 6:55 AM 10:20 AM 7:35 AM 7:55 PM	05 Min. 1 Hr. 00 Min. 25 Min.	40 Min. 40 Min. 35 Min. 30 Min. 35 Min. 25 Min.	
22	C 259 C 260 C 261 C 262 C 262 Y 259 A 107	3:30 AM 5:30 AM 7:00 AM 8:05 AM 9:35 AM 6:10 PM 6:15 PM	C 259 C 260 C 261 C 262 C 262 Y 259 A 107	6:35 AM 7:20 AM 8:05 AM 6:05 PM 6:15 PM	1 Hr. 30 Min. 05 Min.	3 Hr. 05 Min. 45 Min. 20 Min.	Same
23	Part C 264 C 265 C 264 C 265 C 265 Y 264 A 108	8:30 AM 11:40 AM 12:35 PM 12:40 PM 8:25 PM	C 264 C 265 C 265 C 265 Y 264 A 108	7:45 AM 12 Noon 12:35 PM 8:20 PM	45 Min. 45 Min. 3 Hr. 55 Min.	20 Min.	Same
24	Part C 266 C 266 C 267 Y 266 A 109	5:15 AM 5:55 AM 10:35 AM 6:10 PM	C 266 C 266 C 267 Y 266 A 109	4:45 AM 5:05 AM 10:55 AM 5:35 PM	30 Min. 10 Min. 30 Min. 35 Min.	20 Min.	
25	OT 267 C 268 C 269 C 269 Y 267 A 110	6:30 AM 4:45 AM 8:50 AM 9:30 AM 5:20 PM 7:30 PM	OT 267 C 268 C 269 C 269 Y 267 A 110	5:15 AM 5:35 AM 8:55 AM 4:45 PM 6:45 PM	1 Hr. 15 Min. 1 Hr. 10 Min. 35 Min. 35 Min. 45 Min.	05 Min.	
26	C 270 C 271 C 271 C 272 C 272 Y 270 Y 271	6:20 AM 8:55 AM 9:15 AM 10:45 AM 10:55 AM 11:20 AM 7:30 PM 7:40 PM	C 270 C 271 C 271 C 272 C 272 Y 270 Y 271	6:15 AM 7:35 AM 9:20 AM 10:35 AM 7:30 PM	05 Min. 1 Hr. 20 Min. 1 Hr. 25 Min. 30 Min. 45 Min. 20 Min.	05 Min. 20 Min.	

APRIL 1960

DATE (a)	PERMISSIBLE BLOCK OR DISPATCH IDENTIFICATION (b)	ACTUAL ARRIVAL EL PASO (c)	PERMISSIBLE BLOCK OR DISPATCH IDENTIFICATION (d)	DISPATCHED ARRIVAL EL PASO (e)	DISPATCHED IN ADVANCE OF ACTUAL (f)	DISPATCHED LATER THAN ACTUAL (g)	OPERATIONS SAME AS ACTUAL (h)
27	CBA 272 C 273 C 274 CT 274 C 275 CT 275 Y 236 Y 237	5:10 AM 7:30 AM 7:40 AM 10:25 AM 10:50 AM 11:10 AM 6:20 PM 6:35 PM	CBA 272 C 273 C 274 CT 274 C 275 CT 275 Y 236 Y 237	6:50 AM 8:30 AM 9:00 AM 6:45 PM	40 Mins. 1 Hr. 35 Mins. 1 Hr. 30 Mins. 2 Hr. 10 Mins.	1 Hr. 40 Mins. 50 Mins. 25 Mins. 10 Mins.	
28	CBA 275 C 276 C 277 C 278 CT 278 Y 238 H 30	6:15 AM 6:45 AM 8:55 AM 11:05 AM 11:35 AM 5:15 PM 7:05 PM	CBA 275 C 276 C 277 C 278 CT 278 Y 238 H 30	7:05 AM 9:30 AM 10:45 AM 5:30 PM 6:55 PM	30 Mins. 50 Mins. 10 Mins.	50 Mins. 20 Mins. 35 Mins. 05 Mins.	
29	CBA 278 C 279 C 280 C 281 CT 281 Y 239	4:40 AM 5:30 AM 6:10 AM 10:35 AM 10:50 AM 5:50 PM	CBA 278 C 279 C 280 C 281 CT 281 Y 239	7:35 AM 7:40 AM 8:40 AM 6:35 PM	1 Hr. 35 Mins. 2 Hr. 10 Mins.	2 Hr. 35 Mins. 2 Hr. 15 Mins. 1 Hr. 30 Mins.	
30	CBA 281 C 282 C 283 CT 283 Y 240	3:55 AM 5:55 AM 7:10 AM 7:30 AM 6:45 PM	CBA 281 C 282 C 283 CT 283 Y 240	3:50 AM 6:00 AM 7:25 AM 6:55 PM	05 Mins. 05 Mins.	15 Mins. 05 Mins. 15 Mins. 10 Mins.	
1	CBA 283	5:00 AM	CBA 283	5:30 AM		20 Mins.	

MAY 1960

5729

3251



**Defendant's Exhibit No. 244 (Witness Sines)**  
**Jan. 30, 1941**

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

ARRIVAL TIME AT YUMA, ARIZONA  
OF "SSW" AND "GHW" WESTWARD MANIFEST TRAINS  
ACTUAL OPERATION COMPARED WITH REDISPATCHED  
OPERATION, WITH NO RESTRICTION AND USING AC  
POWER AND LONG SIDINGS

MONTH OF APRIL 1940

(1)	NUMBER OF TRAINS ARRIVING YUMA - ACTUAL, . . . . .	89
(2)	NUMBER OF TRAINS ARRIVING YUMA - REDISPATCHED, . . . . .	88
(3)	NUMBER OF BLOCKS AND MANIFEST SECTIONS INVOLVED, . . . . .	96
(4)	NUMBER OF REDISPATCHED BLOCKS ARRIVING YUMA -	
	(a) AT SAME TIME AS ACTUAL BLOCKS, . . . . .	55
	(b) IN ADVANCE OF ACTUAL BLOCKS, . . . . .	24
	(c) LATER THAN ACTUAL BLOCKS, . . . . .	17
(5)	TOTAL TIME -	
	(a) IN ADVANCE OF ACTUAL, . . . . .	8 HR. 20 MINS.
	(b) LATER THAN ACTUAL, . . . . .	6 HR. 40 MINS.
(6)	AVERAGE TIME OF 24 BLOCKS IN ADVANCE OF ACTUAL, . . . . . (MINS.)	21
(7)	AVERAGE TIME OF 17 BLOCKS LATER THAN ACTUAL, . . . . . (MINS.)	23

SSW - SUNSET WEST MANIFEST  
GHW - GOLD BALL WEST MANIFEST

APRIL 1940

DATE (a)	MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL TIME (c)	MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL TIME (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	REDISPATCHED SAME AS ACTUAL (h)
5	SSW 4 GHW 1-3 GHW 2-3 GHW 3-3	3:45 AM 5:45 AM 6:20 AM 10:45 AM	SSW 4 GHW 1-3 GHW 2-3 GHW 3-3	3:45 AM 5:45 AM 6:40 AM 10:45 AM		20 Mins.	Same Same Same Same
6	SSW 5 GHW 1-4 GHW 2-4 GHW 3-4	6:10 AM 6:35 AM 7:15 AM 10:35 AM	SSW 5 GHW 1-4 GHW 2-4 GHW 3-4	6:10 AM 6:20 AM 7:05 AM 10:35 AM	15 Mins. 10 Mins.		Same Same Same Same
7	SSW 6 GHW 1-5 GHW 2-5	6:30 AM 6:40 AM 9:00 AM	SSW 6 GHW 1-5 GHW 2-5	6:30 AM 6:55 AM 9:00 AM		15 Mins.	Same Same Same
8	SSW 7 GHW 1-6 GHW 2-6 GHW 3-6	6:00 AM 7:35 AM 9:15 AM 9:25 AM	SSW 7 GHW 1-6 GHW 2-6 GHW 3-6	6:00 AM 7:20 AM ( 9:15 AM	15 Mins. 10 Mins.		Same Same Same Same
9	SSW 1-8 GHW 1-7 GHW 2-7 (SSW 2-8) (GHW 3-7)	4:25 AM 5:45 AM 10:45 AM 11:55 AM	SSW 1-8 GHW 1-7 GHW 2-7 (SSW 2-8) (GHW 3-7)	3:40 AM 5:40 AM 9:55 AM ( 11:45 AM	45 Mins. 5 Mins. 50 Mins. 10 Mins. 10 Mins.		
10	SSW 9 GHW 1-8 GHW 2-8 GHW 3-8	2:55 AM 5:35 AM 6:40 AM 9:10 AM	SSW 9 GHW 1-8 GHW 2-8 GHW 3-8	2:55 AM 5:55 AM 6:40 AM 8:10 AM		20 Mins.	Same Same Same Same
11	(SSW 10) (GHW 1-9) GHW 2-9 GHW 3-9	5:05 AM 6:20 AM 7:20 AM	(SSW 10) (GHW 1-9) GHW 2-9 GHW 3-9	( 5:05 AM 6:20 AM 7:35 AM		15 Mins.	Same Same Same Same
12	SSW 11 GHW 1-10 GHW 2-10	3:30 AM 6:20 AM 7:30 AM	SSW 11 GHW 1-10 GHW 2-10	3:30 AM 6:20 AM 7:30 AM			Same Same Same
13	SSW 12 GHW 1-11 GHW 2-11	6:20 AM 8:15 AM 9:55 AM	SSW 12 GHW 1-11 GHW 2-11	6:15 AM 8:15 AM 9:40 AM	5 Mins. 15 Mins.		Same Same Same
14	SSW 13 GHW 1-12 GHW 2-12	3:45 AM 5:20 AM 6:25 AM	SSW 13 GHW 1-12 GHW 2-12	4:00 AM 5:20 AM 6:50 AM		15 Mins. 25 Mins.	Same Same Same
15	(SSW 14) (GHW 1-13) GHW 2-13 GHW 3-13	5:40 AM 6:50 AM 7:25 AM	(SSW 14) (GHW 1-13) GHW 2-13 GHW 3-13	( 5:40 AM 6:50 AM 7:25 AM			Same Same Same Same
16	(SSW 15) (GHW 1-14) GHW 2-14 GHW 3-14 GHW 4-14	5:45 AM 6:15 AM 6:45 AM 9:05 AM	(SSW 15) (GHW 1-14) GHW 2-14 GHW 3-14 GHW 4-14	( 5:45 AM 5:55 AM 6:45 AM 9:05 AM	20 Mins.		Same Same Same Same
17	SSW 16	5:40 AM	SSW 16	5:40 AM			

6	SNW 5 GNW 1-4 GNW 2-4 GNW 3-4	6:10 AM 6:35 AM 7:15 AM 10:35 AM	SNW 5 GNW 1-4 GNW 2-4 GNW 3-4	6:10 AM 6:20 AM 7:05 AM 10:35 AM	15 Mins. 10 Mins.		Same
7	SNW 6 GNW 1-5 GNW 2-5	6:30 AM 6:40 AM 9:00 AM	SNW 6 GNW 1-5 GNW 2-5	6:30 AM 6:55 AM 9:00 AM		15 Mins.	Same
8	SNW 7 GNW 1-6 GNW 2-6 GNW 3-6	6:00 AM 7:35 AM 9:15 AM 9:25 AM	SNW 7 GNW 1-6 GNW 2-6 GNW 3-6	6:00 AM 7:20 AM 9:15 AM	15 Mins. 10 Mins.		Same
9	SNW 1-8 GNW 1-7 GNW 2-7 (SNW 2-8) (GNW 3-7)	4:25 AM 5:45 AM 10:45 AM 11:55 AM	SNW 1-8 GNW 1-7 GNW 2-7 (SNW 2-8) (GNW 3-7)	3:40 AM 5:40 AM 9:55 AM 11:45 AM	45 Mins. 5 Mins. 50 Mins. 10 Mins. 10 Mins.		Same
10	SNW 9 GNW 1-8 GNW 2-8 GNW 3-8	2:55 AM 5:35 AM 6:40 AM 9:10 AM	SNW 9 GNW 1-8 GNW 2-8 GNW 3-8	2:55 AM 5:55 AM 6:40 AM 8:10 AM		20 Mins.	Same
11	(SNW 10) (GNW 1-9) GNW 2-9 GNW 3-9	5:05 AM 6:20 AM 7:20 AM	(SNW 10) (GNW 1-9) GNW 2-9 GNW 3-9	5:05 AM 6:20 AM 7:35 AM		15 Mins.	Same
12	SNW 11 GNW 1-10 GNW 2-10	3:30 AM 6:20 AM 7:30 AM	SNW 11 GNW 1-10 GNW 2-10	3:30 AM 6:20 AM 7:30 AM			Same
13	SNW 12 GNW 1-11 GNW 2-11	6:20 AM 8:15 AM 9:55 AM	SNW 12 GNW 1-11 GNW 2-11	6:15 AM 8:15 AM 9:40 AM	5 Mins. 15 Mins.		Same
14	SNW 13 GNW 1-12 GNW 2-12	3:45 AM 5:20 AM 6:25 AM	SNW 13 GNW 1-12 GNW 2-12	4:00 AM 5:20 AM 6:50 AM		15 Mins. 25 Mins.	Same
15	(SNW 14) (GNW 1-13) GNW 2-13 GNW 3-13	5:40 AM 6:50 AM 7:25 AM	(SNW 14) (GNW 1-13) GNW 2-13 GNW 3-13	5:40 AM 6:50 AM 7:25 AM			Same
16	(SNW 15) (GNW 1-14) GNW 2-14 GNW 3-14 GNW 4-14	5:45 AM 6:15 AM 6:45 AM 9:05 AM	(SNW 15) (GNW 1-14) GNW 2-14 GNW 3-14 GNW 4-14	5:45 AM 5:55 AM 6:45 AM 9:05 AM	20 Mins.		Same
17	SNW 16 GNW 1-15 GNW 2-15	5:40 AM 8:25 AM 9:40 AM	SNW 16 GNW 1-15 GNW 2-15	5:40 AM 6:45 AM 9:40 AM	1 Hr. 40 Mins.		Same
18	SNW 17 GNW 1-16 GNW 2-16	4:15 AM 6:05 AM 9:30 AM	SNW 17 GNW 1-16 GNW 2-16	5:30 AM 6:05 AM 9:10 AM		1 Hr. 15 Mins.	Same
19	SNW 18 GNW 1-17 GNW 2-17	3:20 AM 6:00 AM 9:35 AM	SNW 18 GNW 1-17 GNW 2-17	4:10 AM 6:00 AM 9:35 AM	20 Mins.	50 Mins.	Same



APRIL 1940

DATE (a)	MANIFEST IDENTIFICATION (b)	ACTUAL ARRIVAL YUMA (c)	MANIFEST IDENTIFICATION (d)	REDISPATCHED ARRIVAL YUMA (e)	REDISPATCHED IN ADVANCE OF ACTUAL (f)	REDISPATCHED LATER THAN ACTUAL (g)	REDISPATCHED SAME AS ACTUAL (h)
20	(SSW 19 ) (GEW 1-18) GEW 2-18 GEW 3-18 GEW 4-18	6:00 AM 6:50 AM 7:50 AM 10:00 AM	(SSW 19 ) (GEW 1-18) GEW 2-18 GEW 3-18 GEW 4-18	{ 5:50 AM 6:35 AM 8:30 AM 10:00 AM	10 Mins. 10 Mins. 15 Mins.	40 Mins.	Same
21	SSW 20 GEW 1-19 GEW 2-19	4:10 AM 5:10 AM 9:05 AM	SSW 20 GEW 1-19 GEW 2-19	4:00 AM 5:40 AM 9:05 AM	10 Mins.	30 Mins.	Same
22	SSW 1-21 GEW 1-20 GEW 2-20 SSW 2-21	2:30 AM 5:30 AM 8:15 AM 1:30 PM	SSW 1-21 GEW 1-20 GEW 2-20 SSW 2-21	2:20 AM 5:35 AM 8:15 AM 1:55 PM	10 Mins.	5 Mins. 25 Mins.	Same
23	SSW 22 GEW 1-21 GEW 2-21	2:35 AM 7:55 AM 9:35 AM	SSW 22 GEW 1-21 GEW 2-21	2:35 AM 7:55 AM 9:35 AM			Same Same Same
24	SSW 23 GEW 1-22 GEW 2-22 GEW 3-22	4:05 AM 6:10 AM 6:55 AM 7:35 AM	SSW 23 GEW 1-22 GEW 2-22 GEW 3-22	4:05 AM 6:10 AM 6:55 AM 7:40 AM		5 Mins.	Same Same Same
25	SSW 24 GEW 1-23 GEW 2-23	3:25 AM 5:45 AM 7:05 AM	SSW 24 GEW 1-23 GEW 2-23	3:40 AM 5:45 AM 7:05 AM		15 Mins.	Same Same
26	SSW 1-25 GEW 1-24 (SSW 2-25) (GEW 2-24)	5:40 AM 6:00 AM 7:30 AM	SSW 1-25 GEW 1-24 (SSW 2-25) (GEW 2-24)	5:40 AM 6:00 AM 7:30 AM			Same Same Same Same
27	(SSW 26 ) (GEW 1-25) GEW 2-25 GEW 3-25	5:50 AM 6:00 AM 7:20 AM	(SSW 26 ) (GEW 1-25) GEW 2-25 GEW 3-25	5:40 AM 5:50 AM 7:20 AM	10 Mins. 10 Mins. 10 Mins.		Same
28	SSW 27 GEW 1-26 GEW 2-26	4:35 AM 6:20 AM 6:50 AM	SSW 27 GEW 1-26 GEW 2-26	4:35 AM 6:45 AM 6:50 AM		25 Mins.	Same Same
29	SSW 1-28 GEW 1-27 GEW 2-27 SSW 2-28	3:10 AM 5:45 AM 7:05 AM 9:10 AM	SSW 1-28 GEW 1-27 GEW 2-27 SSW 2-28	3:10 AM 5:45 AM 7:15 AM 7:55 AM	1 Hr. 15 Mins.	10 Mins.	Same Same
30	SSW 1-29 GEW 1-28 GEW 2-28 SSW 2-29	5:50 AM 6:20 AM 7:55 AM 9:00 AM	SSW 1-29 GEW 1-28 GEW 2-28 SSW 2-29	5:40 AM 6:30 AM 7:55 AM 9:00 AM	10 Mins.	10 Mins.	Same Same

**Defendant's Exhibit No. 245 (Witness Sines)**  
**Jan. 30, 1941**

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

REDISPATCH STUDY PAGE DATA  
TUM, ARIZONA TO EL PASO, TEXAS  
FOR PERIOD APRIL 4TH TO APRIL 30TH, 1940  
ACTUAL OPERATION COMPARED WITH REDISPATCHED OPERATION, WITH NO  
RESTRICTION AND USING AC POWER AND LONG SIDINGS

	NO. OF TRAINS (a)	TRAIN MILES (b)	TRAINERS' RATES			LOCO- MOTIVE MILES (f)	ENGINEERS' RATES			TOTAL RATES		
			BASIC (c)	VARIABLE (d)	TOTAL (e)		BASIC (g)	VARIABLE (h)	TOTAL (i)	BASIC (j)	VARIABLE (k)	TOTAL (l)
NORTH LINE												
(1) TUMA - GILA												
ACTUAL	377	46,371	\$12,353.33	\$1,082.51	\$13,435.84	19,155	\$7,946.33	\$ 896.93	\$8,843.26	\$20,279.66	\$1,979.44	\$22,259.10
REDISPATCHED	296	36,408	9,816.36	867.92	10,684.28	39,184	6,992.61	795.95	7,788.56	16,808.97	1,663.97	18,472.94
SAVING FOR PERIOD	81	9,963	2,516.97	214.59	2,731.56	5,971	953.72	100.98	1,054.70	3,470.69	315.57	3,786.26
(2) GILA - TUCSON												
ACTUAL	382	48,766	12,984.75	1,156.28	14,141.03	56,757	9,795.30	934.91	10,730.21	22,780.05	2,091.19	24,871.24
REDISPATCHED	295	32,430	80,064.92	912.12	10,977.04	44,330	8,549.63	816.57	9,366.20	18,613.55	1,728.69	20,342.24
SAVING FOR PERIOD	87	11,336	2,919.83	244.16	3,163.99	12,427	1,246.67	118.34	1,365.01	4,166.50	362.50	4,529.00
(3) TUCSON - LONGHORN												
ACTUAL	413	67,318	19,599.30	868.54	20,467.84	98,702	16,718.43	1,028.51	17,747.34	36,277.93	1,897.05	38,174.98
REDISPATCHED	311	50,445	14,579.42	670.96	15,250.38	68,577	12,957.53	827.33	13,784.86	27,536.95	1,498.29	29,035.24
SAVING FOR PERIOD	102	16,873	4,979.88	197.58	5,177.46	30,125	3,761.10	201.18	3,962.28	8,740.98	398.76	9,139.74
(4) LONGHORN - EL PASO												
ACTUAL	378	54,134	13,189.71	1,087.90	14,277.61	56,365	9,070.15	1,236.74	10,306.89	22,239.88	3,124.64	25,364.52
REDISPATCHED	310	44,077	12,009.56	1,789.74	13,799.30	46,860	8,494.54	1,160.97	9,655.51	20,504.10	2,950.71	23,454.81
SAVING FOR PERIOD	68	10,097	1,160.17	98.16	1,258.33	9,505	575.63	75.77	651.38	1,735.78	173.93	1,909.71
(5) EL PASO - STERLING												
ACTUAL	-	-	-	-	-	-	-	-	-	-	-	-
REDISPATCHED	24	420	162.82	20.34	183.16	420	95.94	12.00	107.94	258.76	32.34	291.10
INCREASE FOR PERIOD	24	420	162.82	20.34	183.16	420	95.94	12.00	107.94	258.76	32.34	291.10
(6) TOTAL - NORTH LINE												
ACTUAL	1,560	218,589	58,047.17	4,995.23	63,042.40	260,979	43,530.41	4,097.09	47,627.50	101,577.52	9,092.32	110,669.84
REDISPATCHED	1,236	171,140	46,633.08	4,361.08	50,994.16	199,771	37,089.25	3,612.82	40,702.07	83,722.33	7,872.90	91,595.23
SAVING FOR PERIOD	324	47,449	11,414.09	734.15	12,148.24	61,208	6,441.16	484.27	6,925.43	17,855.19	1,218.42	19,073.61
SOUTH LINE												
(7) TUCSON - DOUGLAS												
ACTUAL	71	8,803	2,598.48	356.87	2,955.35	9,613	1,786.20	390.42	2,176.62	4,384.68	747.29	5,131.97
REDISPATCHED	71	8,803	2,598.48	356.87	2,955.35	9,613	1,786.20	390.42	2,176.62	4,384.68	747.29	5,131.97
SAVING FOR PERIOD	-	-	-	-	-	-	-	-	-	-	-	-
(8) DOUGLAS - HISHER JUNCTION												
ACTUAL	48	1,050	625.94	54.83	680.77	1,050	349.22	42.71	391.93	975.16	97.54	1,072.70
REDISPATCHED	48	1,050	625.94	54.83	680.77	1,050	349.22	42.71	391.93	975.16	97.54	1,072.70
SAVING FOR PERIOD	-	-	-	-	-	-	-	-	-	-	-	-
(9) DOUGLAS - EL PASO												
ACTUAL	57	12,426	3,077.39	250.32	3,327.71	12,444	2,302.25	178.13	2,480.38	5,279.64	428.45	5,708.09
REDISPATCHED	57	12,426	3,077.39	250.32	3,327.71	12,444	2,302.25	178.13	2,480.38	5,279.64	428.45	5,708.09
SAVING FOR PERIOD	-	-	-	-	-	-	-	-	-	-	-	-
(10) TOTAL - SOUTH LINE												
ACTUAL	176	22,279	6,301.81	662.02	6,963.83	23,307	4,337.67	611.26	4,948.93	10,659.48	1,273.28	11,932.76
REDISPATCHED	176	22,279	6,301.81	662.02	6,963.83	23,307	4,337.67	611.26	4,948.93	10,659.48	1,273.28	11,932.76
SAVING FOR PERIOD	-	-	-	-	-	-	-	-	-	-	-	-
(11) TOTAL - NORTH AND SOUTH LINES												
ACTUAL	1,736	240,868	64,348.92	5,657.25	70,006.17	284,286	47,868.08	4,708.35	52,576.43	112,237.00	10,365.60	122,602.60
REDISPATCHED	1,412	193,419	52,934.90	4,923.10	57,858.00	222,678	41,426.92	4,234.08	45,661.00	94,361.81	9,146.18	103,507.99
SAVING FOR PERIOD	324	47,449	11,414.09	734.15	12,148.24	61,608	6,441.16	484.27	6,925.43	17,855.19	1,218.42	19,073.61
(12) Railroad Retirement and Unemployment Insurance Tax: 5.945 Trainers, 5.735 Engineers					721.60				396.83			1,118.43
(13) GRAND TOTAL					12,869.78				7,322.26			20,192.04

# Defendant's Exhibit No. 246 (Witness Sines)

~~Jan. 30, 1941~~ Jan. 30, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

STATE OF ARIZONA

STATISTICS IN CONNECTION  
WITH PASSENGER TRAINS EXCEEDING 14 CARS IN LENGTH  
OPERATED DURING MARCH AND APRIL, 1940

TRAIN NUMBER	LIMITS	TIME	TRAIN MILES	CAR MILES
(a)	(b)	(c)	(d)	(e)
<b>EASTWARD</b>				
2	Tum to Arizona-New Mexico State Line via Phoenix and Bowie, 435 miles	1	435	6,445
	Tum to Tucson via Phoenix, 294 miles	4	1,176	18,228
	Phoenix to Tucson, 121 miles	6	726	11,011
	Wilcox to Arizona-New Mexico State Line, 50 miles	1	50	800
4	Tum to Arizona-New Mexico State Line via Phoenix and Douglas, 468 miles	4	1,872	28,086
	Tum to Tucson via Phoenix, 294 miles	1	294	4,410
	Phoenix to Arizona-New Mexico State Line via Douglas, 296 miles	7	2,072	31,376
	Phoenix to Tucson, 121 miles	1	121	1,936
	Tucson to Arizona-New Mexico State Line via Douglas, 175 miles	1	175	2,625
6	Tum to Arizona-New Mexico State Line via Gila and Bowie, 392 miles	2	784	12,152
	Tum to Tucson via Gila, 251 miles	4	1,004	15,060
	Tucson to Bowie, 115 miles	1	115	1,725
44	Tum to Phoenix, 175 miles	1	175	2,625
	Tum to Phoenix and Tucson to Arizona-New Mexico State Line via Douglas, 348 miles	2	696	10,441
	Phoenix to Tucson, 121 miles	1	121	1,815
	Tucson to Arizona-New Mexico State Line via Douglas, 175 miles	1	175	2,625
	<b>TOTAL EASTWARD</b>	<b>36</b>	<b>9,993</b>	<b>152,991</b>
<b>WESTWARD</b>				
1	Arizona-New Mexico State Line to Tucson via Bowie, 140 miles	3	420	6,300
	Arizona-New Mexico State Line to Wilcox, 50 miles	1	50	800
	Arizona-New Mexico State Line to Tum via Bowie and Gila, 391 miles	2	782	12,261
3	Tucson to Arlington via Phoenix, 166 miles	1	166	2,511
5	Arizona-New Mexico State Line to Tum via Douglas and Phoenix, 468 miles	1	468	7,314
	Phoenix to Tum, 175 miles	6	1,038	15,743
	Tucson to Tum via Phoenix, 294 miles	10	2,940	45,449
	<b>TOTAL WESTWARD</b>	<b>24</b>	<b>5,664</b>	<b>90,758</b>
	<b>TOTAL EASTWARD AND WESTWARD</b>	<b>60</b>	<b>15,657</b>	<b>243,749</b>



Defendant's Exhibit No. 247 (Witness Barker)  
Feb. 4, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

FREIGHT CARS  
EQUIPPED WITH FRICTION DRAFT GEAR  
JANUARY 1ST, 1941

	CLASS (1)	NUMBER OWNED JANUARY 1ST, 1941 (2)	NUMBER EQUIPPED (3)	PER CENT OF CARS EQUIPPED WITH FRICTION DRAFT GEAR (4)
	INTERCHANGE CARS			
(1)	Box	14,606	13,274	90.88
(2)	Automobile	5,606	5,023	89.60
(3)	Furniture	402	402	100.00
(4)	Stock	2,814	1,789	63.57
(5)	Flat	4,602	2,421	52.61
(6)	Gondolas	5,363	4,663	86.95
(7)	Ballast	2,503	1,316	52.58
(8)	Tanks	1,951	1,557	79.81
(9)	Refrigerator	20	20	100.00
(10)	Miscellaneous	20	17	85.00
(11)	TOTAL	37,887	30,482	80.46
	CARS CONFINED TO HOME LINES			
(12)	Logging	2,005	81	4.04

JANUARY 1ST, 1941

	CLASS	NUMBER OWNED JANUARY 1ST, 1941	NUMBER EQUIPPED	PER CENT OF CARS EQUIPPED WITH FRICTION DRAFT GEAR
	(1)	(2)	(3)	(4)
	INTERCHANGE CARS			
(1)	Box	14,606	13,274	90.88
(2)	Automobile	5,606	5,023	89.60
(3)	Furniture	402	402	100.00
(4)	Stock	2,814	1,789	63.57
(5)	Flat	4,602	2,421	52.61
(6)	Gondolas	5,363	4,663	86.95
(7)	Ballast	2,503	1,316	52.58
(8)	Tanks	1,951	1,557	79.81
(9)	Refrigerator	20	20	100.00
(10)	Miscellaneous	20	17	85.00
(11)	TOTAL	37,887	30,482	80.46
	CARS CONFINED TO HOME LINES			
(12)	Logging	2,005	81	4.04
(13)	Caboose	686	106	15.45
(14)	Narrow Gauge	206	-	-
(15)	TOTAL	2,897	187	6.45
(16)	GRAND TOTAL	40,784	30,669	75.20

Defendant's Exhibit No. 248 (Witness Sines)  
Feb. 4, 1941

TOTAL ROAD MILEAGE AS OF DECEMBER 31, 1939  
AND FREIGHT TRAIN CAR MILES AND REVENUE PASSENGER MILES  
OPERATED DURING YEAR 1939  
CLASS I RAILROADS OF UNITED STATES AND OF CERTAIN RAILROADS  
CONCERNING WHICH INDIVIDUAL WITNESSES HAVE HERETOFORE  
TESTIFIED ON THE SUBJECT OF OPERATING COSTS

LINE NO.	NAME OF WITNESS (a)	VOLUME NO. OF TRANSCRIPT (b)	BEGINNING PAGE OF TRANSCRIPT (c)	NAME OF RAILROAD (d)	AVERAGE MILEAGE OF ROAD OPERATED (e)	PERCENT MILES (f)	FRT. TRAIN CAR MILES OPERATED (THOUSANDS) (g)	PAGE REFERENCE PRELIMINARY ABSTRACT I.C.C. STATISTICS OF RAILWAYS, 1939 (h)	REVENUE PASSENGER MILES (THOUSANDS) (i)
1	Farneslee	3 - 4	272	All Class I Railroads of U. S.	222,020	22	22,222,792	19	22,651,334
2	Porter	2	150	New York Central RR Co.	10,940	12	1,785,692	19	2,090,905
3	Kirk	3 - 4	375	Missouri Pacific RR Co.	7,146	26	611,218	21	261,873
4	Young	4-5-6	480	Illinois Central RR.	6,537	29	717,212	20	590,937
5	Burns	6 - 7	722	Great Northern Ry. Co.	7,976	47	543,341	21	1,120
6	Gregory	6 - 7	739	Northern Pacific Ry. Co.	6,423	49	399,282	21	227,774
7	Siddall	6 - 7	753	Rock Island Lines	7,041	52	532,918	21	442,069
8	Oakley	6 - 7	764	Erie Railroad	2,289	56	529,875	19	319,416
9	Millard	7	780	St. Louis Southwestern Ry. Lines	1,679	60	137,774	21	17,955
10	Smell	7	801	Chicago & Northwestern Ry. Co.	2,346	64	470,645	21	696,071
11	Albert	7	817	Pennsylvania RR.	9,990	68	2,063,968	20	3,147,222
12	Callin	8	996	Union Pacific RR Co.	9,901	79	1,126,133	21	1,027,776
13	Hammond	9 - 10	1,137	Boston and Maine RR.	1,912	87	170,267	19	369,514
14	Kiley	10	1,220	Chicago, Milwaukee, St. Paul & Pacific RR.	10,912	96	625,736	21	442,434
15	White	11	1,374	Chicago, Burlington & Quincy RR. Co.	9,922	103	629,609	21	544,510
16	Wilbur	12-14	1,586	Chesapeake & Ohio Ry. Co.	3,053	121	762,623	20	145,613
17	McDonald	15-16	1,735	Atchafalpa, Topeka & Santa Fe System	13,456	131	1,010,208	21	1,023,209
18	Mason	12-17 19	1,523	Southern Pacific Co. - Pacific Lines	8,399	162	966,126	21	1,421,374
19	TOTAL OF LINES (2) TO (18) INCLUSIVE				122,020	-	12,172,145	-	12,601,934
20	PERCENTAGE OF LINE (19) TO LINE (1)				54.95%	-	59.00%	-	60.02%

SOURCE: Column (e) from Defendant's exhibits heretofore admitted in evidence as listed in column (f).

Columns (g) and (i) from I.C.C. Abstract of Railway Statistics for the year 1939; specific page reference being shown in column (h) for individual railroads.

Lines (19) and (20) are computations.



**Defendant's Exhibit No. 249 (Witness Sines)**  
**Feb. 4, 1941**

**SOUTHERN PACIFIC COMPANY**  
**(Pacific Lines)**

**COMPARISONS BETWEEN TUCSON DIVISION, PACIFIC LINES, AND SALT LAKE DIVISION**  
**SHOWING TRENDS IN FREIGHT TRAIN AND LOCOMOTIVE LOADING,**  
**AND EFFECT ON FUEL CONSUMPTION**

	TOTAL PERCENTAGE CHANGE FOR TWO PERIODS 1924-25 TO 1928-29 AND 1930-31 TO 1938-39		
	TUCSON DIVISION (a)	PACIFIC LINES (b)	SALT LAKE DIVISION (c)
Percentage Increase in Cars per Train . . . . .	D 0.43	14.73	30.61
Percentage Increase in Gross Ton Miles per Train Mile . . . . .	3.95	18.70	35.42
Percentage Increase in Gross Ton Miles per Locomotive Mile . . . . .	3.96	20.87	36.57
Percentage Decrease in Pounds of Fuel per 1000 Gross Ton Miles . . . . .	D 12.62	D 22.38	D 26.06

D - Indicates Decrease.

SOURCE: Southern Pacific Company Forms 522 and 521.

## TUCSON DIVISION

## MAIN AND BRANCH

YEAR	TRAIN MILES	LOCOMOTIVE MILES	CAR MILES	GROSS TON MILES EXCL. LOCO. AND TENDER (THOUS.)	NET TONS FUEL	CARS PER TRAIN	GROSS TON MILES PER TRAIN MILE	GROSS TON MILES PER LOCO. MILE	POUNDS OF FUEL PER 1000 GROSS TON MILES
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1924	1,262,381	1,165,166	68,155,950	2,600,029	130,982	54.0	2,060	1,775	101
1925	1,391,255	1,632,384	76,665,581	2,923,819	155,621	55.1	2,102	1,791	107
1926	1,611,795	1,905,654	85,919,165	3,235,612	168,526	53.3	2,007	1,698	104
1927	1,678,797	1,961,675	86,995,112	3,261,458	169,820	51.8	1,943	1,663	104
1928	1,675,019	1,936,486	88,703,729	3,307,074	168,214	53.0	1,974	1,708	102
1929	1,796,663	2,067,906	97,958,307	3,712,182	182,344	54.5	2,066	1,795	98
1930	2,123,339	2,588,817	123,118,585	4,106,375	263,235	58.0	2,118	1,737	117
1931	1,940,825	2,224,187	106,102,112	3,865,806	233,251	57.6	2,100	1,738	121
1932	1,564,526	1,875,511	90,835,368	3,274,761	187,383	58.1	2,093	1,746	114
1933	1,464,477	1,733,409	85,258,453	3,110,006	171,808	58.2	2,123	1,794	110
1934	1,680,189	2,002,585	98,411,317	3,624,314	197,819	58.6	2,157	1,810	109
1935	1,992,926	2,403,539	115,720,793	4,326,429	239,736	58.1	2,171	1,800	111
1936	2,356,102	2,819,929	131,108,994	5,020,317	278,951	55.6	2,131	1,762	111
1937	2,581,764	3,137,449	141,701,698	5,440,250	310,261	54.9	2,115	1,740	114
1938	2,199,250	2,707,470	129,999,600	5,007,078	274,167	59.1	2,277	1,819	110
1939	2,463,209	3,017,392	142,465,627	5,499,410	295,824	57.8	2,233	1,823	108
TOTAL 1924-25	2,653,636	3,097,550	114,821,531	5,523,878	287,606	54.6	2,082	1,783	104.1
TOTAL 1928-29	3,471,712	4,004,392	186,662,036	7,019,256	350,558	53.8	2,022	1,753	99.9
Per Cent Change 2 Years 1924-25 Compared With 2 Years 1928-29						D 1.47	D 2.88	D 1.68	D 4.03
TOTAL 1930-31	3,964,164	4,813,004	229,250,727	8,362,181	496,486	57.8	2,109	1,737	118.7
TOTAL 1938-39	4,662,459	5,721,862	272,465,227	10,506,488	569,991	58.4	2,253	1,835	108.5
Per Cent Change 2 Years 1930-31 Compared With 2 Years 1938-39						1.04	6.83	5.64	D 8.59
TOTAL Per Cent Change for the Two Periods Compared.						D 0.43	3.95	3.96	D 12.62

D - Indicates Decrease

## PACIFIC LINES

## MAIN AND BRANCH

YEAR	TRAIN MILES	LOCOMOTIVE MILES	CAR MILES	GROSS TON MILES EXCL. LOCO. AND TENDER (THOUS.)	NET TONS FUEL	CARS PER TRAIN	GROSS TON MILES PER TRAIN MILE	GROSS TON MILES PER LOCO. MILE	POUNDS OF FUEL PER 1000 GROSS TON MILES
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1924	17,121,585	22,060,845	777,176,907	29,512,517	2,327,668	44.6	1,694	1,338	158
1925	18,057,330	22,971,801	855,651,964	32,239,921	2,436,573	47.4	1,785	1,403	151
1926	18,337,924	23,208,580	893,269,657	33,754,471	2,453,873	48.7	1,941	1,454	145
1927	18,701,635	23,235,661	922,352,883	34,812,462	2,457,371	49.3	1,361	1,498	141
1928	19,454,353	24,046,586	974,681,918	36,736,421	2,521,243	50.1	1,883	1,528	137
1929	19,744,417	24,400,528	995,278,305	37,989,651	2,571,448	50.4	1,924	1,557	135
1930	16,873,073	20,606,190	885,135,380	33,367,924	2,201,046	52.5	1,978	1,619	132
1931	14,124,510	16,754,896	726,276,911	27,129,918	1,782,810	51.4	1,921	1,620	131
1932	12,352,250	14,447,238	611,317,532	22,509,048	1,462,072	49.5	1,322	1,558	130
1933	11,427,188	13,409,326	578,050,895	21,547,351	1,367,946	50.6	1,386	1,507	127
1934	13,082,480	15,631,286	689,298,323	25,953,799	1,532,726	52.7	1,984	1,660	123
1935	14,175,528	16,987,006	758,411,843	28,840,309	1,758,721	53.5	2,035	1,698	122
1936	17,507,446	21,397,174	922,782,455	35,579,016	2,193,837	52.7	2,032	1,663	123
1937	19,207,708	23,758,059	1,005,960,516	38,838,343	2,436,311	52.4	2,022	1,635	125
1938	16,119,057	19,555,827	870,462,516	33,644,736	2,017,947	54.0	2,077	1,720	120
1939	17,299,613	21,032,526	962,123,716	37,603,623	2,170,975	55.6	2,174	1,788	115
TOTAL 1924-25	35,478,915	45,032,646	1,632,828,871	61,752,438	4,764,241	46.0	1,741	1,371	154.3
TOTAL 1928-29	39,198,770	48,447,114	1,969,960,223	74,726,072	5,092,691	50.3	1,906	1,542	136.3
Per Cent Change 2 Years 1924-25 Compared With 2 Years 1928-29						9.35	9.48	12.47	D 11.67
TOTAL 1930-31	30,997,583	37,361,086	1,611,412,291	60,187,842	3,983,356	52.0	1,952	1,619	131.7
TOTAL 1938-39	33,418,670	40,588,353	1,832,586,232	71,248,359	4,199,922	54.8	2,132	1,755	117.6
Per Cent Change 2 Years 1930-31 Compared With 2 Years 1938-39						5.38	9.22	8.40	D 10.71
TOTAL Per Cent Change for the Two Periods Compared						14.73	18.70	20.87	D 22.38



## SALT LAKE DIVISION

## MAIN AND BRANCH

YEAR	TRAIN MILES	LOCOMOTIVE MILES	CAR MILES	GROSS TON MILES EXCL. LOCO. AND TENDER (THOUS.)	NET TONS FUEL	CARS PER TRAIN	GROSS TON MILES PER TRAIN MILE	GROSS TON MILES PER LOCO. MILE	POUNDS OF FUEL PER 1000 GROSS TON MILES
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1924	2,512,265	2,875,894	129,683,119	5,052,658	253,572	51.6	2,011	1,757	100
1925	2,687,730	3,107,340	154,884,285	5,891,284	272,946	57.6	2,192	1,896	93
1926	2,485,971	2,883,667	156,857,337	6,018,202	251,924	63.1	2,121	2,087	84
1927	2,582,291	3,000,773	169,857,262	6,520,017	265,521	65.8	2,526	2,173	81
1928	2,878,615	3,377,900	190,565,082	7,286,721	300,327	66.2	2,531	2,157	82
1929	2,843,361	3,389,927	185,351,583	7,180,618	300,274	65.2	2,526	2,118	84
1930	2,560,519	3,100,575	184,335,235	7,100,425	297,119	72.0	2,773	2,290	84
1931	2,104,285	2,469,858	153,386,367	5,777,372	245,377	72.9	2,746	2,339	85
1932	1,864,231	2,137,112	136,893,195	5,032,436	213,831	73.4	2,699	2,355	85
1933	1,712,262	1,968,741	129,286,939	4,841,197	201,691	75.5	2,827	2,459	83
1934	1,897,770	2,184,319	151,195,773	5,637,970	224,135	79.7	2,971	2,581	80
1935	2,010,254	2,320,863	154,261,993	5,955,649	239,365	76.7	2,963	2,566	80
1936	2,477,279	2,831,042	183,451,764	7,233,395	286,873	74.1	2,920	2,555	79
1937	2,574,550	2,978,435	190,062,342	7,504,868	298,905	73.8	2,915	2,520	80
1938	2,087,211	2,389,220	164,148,112	6,500,398	245,163	78.6	3,114	2,721	75
1939	2,293,710	2,652,812	136,211,865	7,449,707	270,246	81.2	3,248	2,808	73
TOTAL 1924-25	5,199,995	5,983,234	284,567,404	10,943,942	526,518	54.7	2,105	1,829	96.2
TOTAL 1928-29	5,721,976	6,767,827	375,916,665	14,467,339	600,601	65.7	2,528	2,138	83.0
Per Cent Change 2 Years 1924-25 Compared With 2 Years 1928-29						20.11	20.10	16.89	D 13.72
TOTAL 1930-31	4,664,804	5,570,433	337,721,602	12,877,797	542,495	72.4	2,761	2,312	84.3
TOTAL 1938-39	4,380,921	5,042,062	350,359,977	13,950,105	515,1	80.0	3,184	2,767	73.9
Per Cent Change 2 Years 1930-31 Compared With 2 Years 1938-39						10.50	15.32	19.68	D 12.34
TOTAL Per Cent Change for the Two Periods Compared						30.61	35.42	36.57	D 26.06

D - Indicates Decrease

Defendant's Exhibit No. 250 (Witness Sines)  
Feb. 4, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

YUMA, ARIZONA TO LORDSBURG, NEW MEXICO  
FUEL CONSUMPTION COMPARISONS AND ESTIMATED ECONOMIES  
RESULTING FROM ADOPTION OF LONG TRAIN OPERATION

LINE NO.		TOTAL PERCENTAGE CHANGE FOR TWO PERIODS 1924-25 TO 1928-29 AND 1930-31 TO 1938-39			TOTAL PERCENTAGE CHANGE REDISPATCH COMPARED WITH ACTUAL OPERATIONS TUCSON DIVISION (YUMA - LORDSBURG)			
					REDISPATCH OF JUNE AND AUGUST 1938	REDISPATCH OF APRIL 4-30, 1940 USING PRESENT POWER AND SHORT SIDINGS	REDISPATCH OF APRIL 4-30, 1940 USING AC POWER AND LONG SIDINGS	PERCENT INCREASE OF APRIL REDISPATCH USING AC POWER AND LONG SIDINGS OVER APRIL REDISPATCH USING PRESENT POWER AND SHORT SIDINGS
		TUCSON DIVISION (a)	PACIFIC LINES (b)	SALT LAKE DIVISION (c)				
1	Percentage increase in cars per train	D 0.43	14.73	30.61	31.6	D 3.8	21.7	26.6
2	Percentage increase in gross ton miles per train mile	3.95	18.70	35.42	31.3	D 3.9	21.2	26.2
3	Percentage increase in gross ton miles per locomotive mile	3.96	20.87	36.57	34.5	D 4.6	24.9	31.0
4	Percent decrease in pounds of fuel per thousand gross ton miles	D 12.62	D 22.38	D 26.06	D 10%	I 1.5%	D 8.5%	D 10%

		JUNE & AUG. 1938 (h)	APRIL 4-30, 1940 (i)	APRIL 4-30, 1940 (j)	APRIL 4-30, 1940 (k)
5	Barrels of fuel oil consumed, Tucson Division	178,892	97,258	97,258	97,258
6	Average price of fuel oil per barrel	\$0.97	\$0.85	\$0.85	\$0.85
7	Cost of fuel oil consumed	\$173,525	\$82,669	\$82,669	\$82,669
8	Percentage decrease	10.0	1.5	8.5	10.0
9	Decrease in fuel consumption (saving)	D \$17,352	I \$1,240	D \$7,027	D \$8,267

D = DECREASE  
I = INCREASE

Defendant's Exhibit No. 251 (Witness Sines)  
Feb. 4, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

LORDSBURG, NEW MEXICO TO EL PASO, TEXAS  
FUEL CONSUMPTION COMPARISONS AND ESTIMATED ECONOMIES  
RESULTING FROM ADOPTION OF LONG TRAIN OPERATION

LINE NO.		TOTAL PERCENTAGE CHANGE FOR TWO PERIODS 1924-25 TO 1928-29 AND 1930-31 TO 1938-39			TOTAL PERCENTAGE CHANGE REDISPATCH COMPARED WITH ACTUAL OPERATIONS LORDSBURG - EL PASO			
					REDISPATCH OF JUNE AND AUGUST 1938	REDISPATCH OF APRIL 4-30, 1940 USING PRESENT POWER AND SHORT SIDINGS	REDISPATCH OF APRIL 4-30, 1940 USING AC POWER AND LONG SIDINGS	PERCENT INCREASE OF APRIL REDISPATCH USING AC POWER AND LONG SIDINGS OVER APRIL REDISPATCH USING PRESENT POWER AND SHORT SIDINGS
		TUGSON DIVISION (a)	PACIFIC LINES (b)	SALT LAKE DIVISION (c)				
1	Percentage increase in cars per train	D 0.43	14.73	30.61	27.5	0.0	20.7	20.7
2	Percentage increase in gross ton miles per train mile	3.95	18.70	35.42	27.8	0.0	20.9	20.9
3	Percentage increase in gross ton miles per locomotive mile	3.96	20.87	36.57	25.5	0.0	19.1	19.1
4	Percentage decrease in pounds of fuel per thousand gross ton miles	D 12.62	D 22.38	D 26.06	D 7%	-	D 5%	D 5%

	JUNE & AUG. 1938 (h)	APRIL 4-30, 1940 (i)	APRIL 4-30, 1940 (j)	APRIL 4-30, 1940 (k)
5	Barrels of fuel oil consumed, Lordsburg-El Paso	31,773	-	18,070
6	Average price of fuel oil per barrel	\$0.97	-	\$0.85
7	Cost of fuel oil consumed	\$30,820	-	\$15,360
8	Tons of coal consumed, Lordsburg-El Paso	2,100	-	1,553
9	Average price of coal per ton	\$3.42	-	\$3.75
10	Cost of coal consumed	\$7,182	-	\$5,824
11	Total cost of fuel consumed (oil and coal)	\$38,002	-	\$21,184
12	Percentage decrease	7.0	-	5.0
13	Decrease in fuel consumption (savings)	D \$2,660	-	D \$1,059

D = DECREASE



**Defendant's Exhibit No. 252 (Witness Sines)**  
**Feb. 4, 1941**

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

SUMMARY OF ANNUAL SAVINGS AND  
ANNUAL INCREASED COSTS IN FREIGHT AND  
PASSENGER SERVICE BETWEEN  
LOS ANGELES, CALIFORNIA AND EL PASO, TEXAS,  
FOLLOWING REMOVAL OF RESTRICTIONS OF  
ARIZONA TRAIN LIMIT LAW - YEAR 1938

	PERIOD JUNE & AUGUST 1938 (a)	ANNUAL YEAR 1938 (b)
1. FREIGHT SERVICE: Yuma, Arizona to El Paso, Texas. Saving for period June and August, 1938.		
Wages, Exhibit No. <u>224</u>	\$51,103.42	
Fuel, Yuma-Lordsburg Exhibit No. <u>250</u>	17,352.00	
Fuel, Lordsburg-El Paso Exhibit No. <u>251</u>	2,660.00	
TOTAL SAVING FOR PERIOD	\$71,115.42	
Saving for year (saving for period increased in ratio of 17.89% to 100%)		\$397,515
2. PASSENGER SERVICE: Exhibit No. <u>231</u> Los Angeles, California to El Paso, Texas, Year 1938		<u>10,884</u>
3. TOTAL ANNUAL SAVINGS		408,399
4. Investment Charges: Exhibit No. 225. 125,703 track feet of siding extensions, roundhouse and shop facilities, locomotive and caboose investment		79,005
5. NET ANNUAL SAVING		\$329,394

**Defendant's Exhibit No. 253 (Witness Sines)**  
**Feb. 4, 1941**

**SOUTHERN PACIFIC COMPANY**  
**(Pacific Lines)**

**REDISPATCH STUDY - JUNE AND AUGUST, 1938**  
**EXTRA-TERRITORIAL EFFECT**  
**OF ARIZONA TRAIN LIMIT LAW**  
**BETWEEN ARIZONA-NEW MEXICO STATE LINE AND EL PASO, TEXAS**

LINE NO.	DISTRICT	ACTUAL TRAIN MILES (a)	REDISPATCHED TRAIN MILES (b)	TRAIN MILE SAVING (a) minus (b) (c)	PER CENT SAVING (c) divided by (a) (d)
1	Arizona-New Mexico State Line to Lordsburg, New Mexico, 23 miles 749 actual trains 519 redispached trains For period June and August, 1938	17,227	11,937	5,290	30.7%
2	Lordsburg, New Mexico to El Paso, Texas, 149 miles For period June and August, 1938	100,152	78,287	21,865	21.8%
3	Total for period (Lines 1 and 2)	117,379	90,224	27,155	23.1%
4	Train mile saving for year (saving for period increase in ratio of 17.89% to 100.00%)			151,789	
5	Monetary saving for year, (Line 4 x \$ 0.5158*)			\$ 78,293	

\* - Exhibit No. 252 shows annual saving \$329,394 Yuma, Arizona to El Paso, Texas, and 638,569 train miles eliminated equals \$0.5158 per train mile saved.

Defendant's Exhibit No. 254 (Witness Sines)  
Feb. 4, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

LOCOMOTIVE REPAIR COST DATA  
FOR USE IN REMISPATCH STUDIES

LINE NO.	LOCOMOTIVES (a)	NET WEIGHT TONS (b)	MILEAGE OPERATED YEARS 1930 TO 1939 INCL. (c)	SHOP REPAIRS YEARS 1930 TO 1939 INCL. (d)	SHOP REPAIR COST PER MILE (d)÷(c) (e)
1	Mogul 6 - 9	110	2,068,990	\$ 207,004.98	10.01¢
2	Consolidation 9 - 10	134	2,367,112	306,737.81	12.96
3	Mikado 2 - 4	158	2,559,058	367,321.94	14.35
4	Mikado 5 - 6	168	4,495,617	617,084.73	13.73
5	F - 1	191	6,566,488	877,539.69	13.36
6	F - 5	223	4,772,391	795,414.52	16.67
7	SP - 1	256	6,622,409	1,274,315.41	19.24



**Defendant's Exhibit No. 255 (Witness Sines)  
Feb. 4, 1941**

**SOUTHERN PACIFIC COMPANY  
(Pacific Lines)**

**REDISPATCH STUDY - LOCOMOTIVE REPAIRS  
YUMA, ARIZONA TO EL PASO, TEXAS  
FOR PERIOD APRIL 4TH TO APRIL 30TH, 1940  
ACTUAL OPERATION COMPARED WITH REDISPATCHED OPERATION,  
OBSERVING 70 CAR RESTRICTION AND  
USING PRESENT POWER AND SHORT SIDINGS**

LINE NO.	TYPE OF LOCOMOTIVE	ACTUAL LOCOMOTIVE MILES (a)	REPAIR COST PER MILE (CENTS) (b)	TOTAL FOR PERIOD (c)	REDISPATCHED LOCOMOTIVE MILES (d)	REPAIR COST PER MILE (CENTS) (e)	TOTAL FOR PERIOD (f)
1	Consolidation 9, 10	280	12.96	\$ 36.29	280	12.96	36.29
2	Mikado 2, 4	149	14.35	21.38	149	14.35	21.38
3	Mikado 5 - 9	17,762	13.73	2,438.72	17,526	13.73	2,406.32
4	Pacific 10, 12	96	13.36	12.83	96	13.36	12.83
5	Mountain 1 - 5	1,649	13.36	220.31	1,583	13.36	211.49
6	F 1	21,443	13.36	2,864.78	20,976	13.36	2,802.39
7	F 3 - 5	110,488	16.67	18,418.35	119,554	16.67	19,929.65
8	SP 1 - 3	132,419	19.24	25,477.42	136,843	19.24	26,328.59
9	TOTAL	284,286	-	\$49,490.08	297,007	-	\$51,748.94
10	INCREASE FOR PERIOD, . . . . . \$2,258.86						

Defendant's Exhibit No. 24x 256 (Witness Sines)  
Feb. 4, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

REDISPATCH STUDY SUMMARY OF INCREASED COSTS,  
YUMA, ARIZONA TO EL PASO, TEXAS,  
FOR PERIOD APRIL 4TH TO APRIL 30TH, 1940  
ACTUAL OPERATION COMPARED WITH REDISPATCHED OPERATION  
OBSERVING 70 CAR RESTRICTION AND USING  
PRESENT POWER AND SHORT SIDINGS.

	INCREASED COSTS
FREIGHT SERVICE: Exhibit No. <u>236</u>  Yuma, Arizona to El Paso, Texas,  increase of 8,733 train miles  and 12,721 locomotive miles.	
Wages Exhibit No. <u>239</u>	\$ 5,832
Fuel, Yuma-Lordsburg Exhibit No. <u>250</u>	1,240
Locomotive repairs Exhibit No. <u>255</u>	2,259
TOTAL INCREASED COST	\$ 9,331

Defendant's Exhibit No. 257 (Witness Sines)  
Feb. 4, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

RELATION BETWEEN LOCOMOTIVE SHOP REPAIR COSTS,  
RUNNING REPAIR COSTS, AND TOTAL COSTS

YEAR	SHOP REPAIRS (a)	RUNNING REPAIRS (b)	TOTAL REPAIRS (c)	PER CENT SHOP TO TOTAL (d)
1930	\$5,454,951	\$4,754,831	\$10,209,782	53.4
1931	3,949,469	4,008,010	7,957,479	49.6
1932	2,973,145	3,285,098	6,258,243	47.5
1933	2,939,863	2,909,167	5,849,030	50.3
1934	3,854,615	2,775,867	6,630,482	58.1
1935	4,252,885	3,119,260	7,372,145	57.7
1936	5,403,178	4,242,818	9,645,996	56.0
1937	6,846,538	5,314,871	12,161,409	56.3
1938	6,297,278	4,447,985	10,745,263	58.6
1939	7,241,933	4,581,745	11,823,678	61.2
TOTAL 1930- 1939	\$49,213,855	\$39,439,652	\$88,653,507	AVERAGE 55.5



Defendant's Exhibit No. 258 (Witness Sines)  
Feb. 4, 1941

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

REDISPATCH STUDY SUMMARY OF SAVINGS  
YUMA, ARIZONA TO EL PASO, TEXAS  
FOR PERIOD APRIL 4TH TO APRIL 30TH, 1940  
ACTUAL OPERATION COMPARED WITH REDISPATCHED OPERATION,  
WITH NO RESTRICTION AND USING AC POWER AND LONG SIDINGS

	SAVING
<b>FREIGHT SERVICE:</b> Exhibit No. <u>242</u>  Yuma, Arizona to El Paso Texas, excluding Phoenix line, eliminate 47,449 train miles, and 61,608 locomotive miles  Wages                      Exh. No. <u>245</u> Fuel, Yuma-Lordsburg      Exh. No. <u>250</u> Fuel, Lordsburg-El Paso   Exh. No. <u>251</u>	      \$20,192 7,027 1,059
<b>TOTAL SAVING</b>	<b>\$28,278</b>

Superior Court, Pima Co., Arizona  
**Defendant's Exhibit No. 259 (Witness Sines)**  
**Feb. 4, 1941**

SOUTHERN PACIFIC COMPANY  
(Pacific Lines)

REDISPATCH STUDY - APRIL 4 - 30, 1940  
ACTUAL OPERATION COMPARED WITH REDISPATCHED  
OPERATION WITH NO-RESTRICTION AND USING  
AC POWER AND LONG SIDINGS  
EXTRA-TERRITORIAL EFFECT OF ARIZONA TRAIN LIMIT LAW  
BETWEEN ARIZONA-NEW MEXICO STATE LINE AND EL PASO, TEXAS

LINE NO.	DISTRICT	ACTUAL TRAIN MILES (a)	REDISPATCHED TRAIN MILES (b)	TRAIN MILE SAVING (a) minus (b) (c)	PER CENT SAVING (c) divided by (a) (d)
(1)	Arizona-New Mexico State Line to Lordsburg, New Mexico, 23 miles 409 actual trains 307 redispatched trains For period April 4th to 30th, 1940	9,407	7,061	2,346	24.9%
(2)	Lordsburg-New Mexico to El Paso, Texas, 149 miles For period April 4th to 30th, 1940	56,134	46,457	9,677	17.2%
(3)	Total for period (Lines 1 and 2)	65,541	53,518	12,023	18.3%
(4)	Monetary saving for month (Line 3 x \$0.596*)			\$7.166	

\* - Exhibit No. 258 shows saving of \$28,278 Yuma, Arizona to El Paso, Texas and 47,449 train miles eliminated; equals \$0.596 per train mile saved.

Defendant's Exhibit No. 260 (Witness J.J. Sullivan)  
Feb. 5, 1941

INTERSTATE COMMERCE COMMISSION RULES GOVERNING MONTHLY REPORTS OF RAILWAY ACCIDENTS  
EFFECTIVE ON JANUARY 1ST, 1922

INTERSTATE COMMERCE COMMISSION  
BUREAU OF STATISTICS

RULES  
GOVERNING  
MONTHLY REPORTS  
OF  
RAILWAY ACCIDENTS

1922 REVISION

(With modifying orders dated September 21, 1922, December 17, 1922,  
and January 14, 1923)



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON: 1922

ORDER.

At a General Session of the INTERSTATE COMMERCE COMMISSION, held at its office in Washington, D. C., on the 31st day of December, A. D. 1921.

*Ordered*, That the annexed draft of rules entitled "Rules governing monthly reports of railway accidents" be, and they hereby are, approved to become effective as of January 1, 1922, and that all common carriers within the scope of the Accident Reports Act, approved May 6, 1910, be governed by the said rules in the preparation and submission of their monthly reports of accidents occurring on or after January 1, 1922.

*It is further ordered*, That the order of this Commission issued under date of October 11, 1918, in the matter of monthly reports of railway accidents be, and it is hereby, annulled except in its application to reports of accidents occurring before January 1, 1922.

By the Commission:

[SEAL]

GEORGE B. MCGINTY,  
Secretary.



## RULES GOVERNING MONTHLY REPORTS OF RAILWAY ACCIDENTS.

## GENERAL INSTRUCTIONS

1. **Operation of a Railway.**—The term *operation of a railway* is used herein to include—

The operation of trains, locomotives, and cars and the facilities incidental to their operation, such as tracks, railway stations, depots, freight houses, warehouses, shops, coaling stations, wharves, and ferries used as an adjunct of train-service, etc., when such operation is performed under the supervision of the carrier by its employees.

The maintenance of equipment, roadway, track, buildings, and other parts of railway plant, when such maintenance is performed under the supervision of the carrier by its employees.

The construction of additions, betterments, and new lines when performed under the supervision of the carrier by its regular forces of employees ordinarily engaged in the construction, operation, or maintenance of existing lines.

2. **Accidents to be Reported.**—A *reportable accident* is an accident arising from the operation of a railway that results in one or more of the following circumstances:

- (a) Damage to railway property amounting to more than \$150, including the expense of clearing wreck, but not damage to or loss of freight or baggage, animals, or property of noncarriers on or adjacent to right of way.
- (b) Death of a person.
- (c) Injury to an employee sufficient to incapacitate him from performing his ordinary duties for more than three days in the aggregate during the 10 days immediately following the accident. This rule applies to employees on duty, and to those classed as not on duty, but does not apply to employees classed as passengers or trespassers.
- (d) Injury to a person other than an employee if the injury is sufficient, in the opinion of the reporting officer, to incapacitate the injured person from following his customary vocation or mode of life for a period of more than one day. This rule applies also to employees classed as passengers or trespassers.

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3. **Accidents Not to be Reported.**—No accident is to be reported unless it arises from the operation of a railway and causes either a reportable casualty or damage exceeding \$150 to railway property (including the cost of clearing wreck); nor are reports of accidents of such nature as the following required: Casualties caused by frightened animals and injuries to persons jumping from vehicles not on railway property; casualties to persons other than employees on duty resulting from assaults by passengers and other persons not railway employees; casualties to employees received in personal encounters with other employees; cases of suicide in which death evidently was not caused by moving trains, locomotives, or cars; and cases of disability or death resulting from natural causes. Unless due to defective or moving railway equipment or negligence, mistake, or misconduct of railway employees, the following kinds of accident are likewise not reportable: Casualties to draymen and other persons, not railway employees, while loading or unloading freight at station and freight-house platforms or at or in cars; and casualties to contractors or their employees engaged in railway contract work.

4. **Deadly Cases.**—Whenever any person declares that he has been injured in a railway accident and the carrier involved denies the allegation, the injury alleged, if of a reportable class, should be reported, but should be designated "claimed but not admitted by carrier," or otherwise, as may be appropriate. Any person found dead on or adjacent to the premises or right of way of a carrier should, unless excluded by the provisions of section 3, be reported by the carrier if the evidence or a coroner's verdict is in effect that such person's death resulted from the operation of its railway.

5. **Joint operations.**—For the purpose of accident classification, the term "joint operations" is intended to cover operations on terminal or other tracks used jointly or in common by two or more reporting carriers, or where the equipment of one carrier moves as its own train over the track of another carrier.

Locomotives, with or without crews, if loaned or leased by one carrier to another, are not thereby made subject to the rules relative to "joint operations."

Trains or locomotives of a nonreporting carrier which may become involved in reportable accidents on the line of a reporting carrier do not fall under the rules pertaining to "joint operations"; such accidents, however, should be included in the report of the reporting carrier.

If a reportable accident occurs on a private siding or track of like character, it should be reported by the carrier having possession of the locomotive concerned or employing the persons involved, but not as a joint-operation accident.

## MONTHLY REPORTS OF RAILWAY ACCIDENTS.

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The question of responsibility among carriers for accidents classifiable under the rules applicable to joint operations is not to be considered in relation to the making of reports concerning them, but all carriers involved should make reports as respectively required.

For rules relative to reporting railway "crossing collisions," see section 8 (e) and (f).

5a. Joint operations—Train accidents.—Train accidents resulting in total damage in excess of \$150 (including cost of clearing wreck), occurring on tracks used by two or more reporting carriers should be severally reported by the carrier or carriers whose equipment or employees are involved and the carrier whose superintendent is in immediate charge of the track on which the accident occurs. Each carrier concerned in such an accident should report the damage to its equipment and other items of expense as provided in the report blank and state (estimating, if unknown) the amount of damage sustained by the other carriers involved; the names of which should be respectively indicated before the items of damage.

If a reportable train accident, though occurring on jointly used track, involves only the equipment and employees of the carrier whose superintendent is in immediate charge of such track, the accident need be reported only by the carrier concerned.

Where two or more trains are involved, each carrier should report casualties to its passengers and employees and also to other persons on its train. Casualties to classes of persons not here mentioned should be appropriately reported by the carrier concerned.

5b. Joint operations—Train-service accidents.—Train-service accidents occurring on terminal or other tracks used jointly or in common by two or more reporting carriers involving employees on duty should be reported by the several carriers concerned. Casualties to other persons should be reported by the carrier whose equipment is involved.

5c. Casualties to Railway Employees on Adjacent Track of Another Road.—When a railway employee on duty is killed or injured on the adjacent track of another carrier, the accident should be reported by both carriers, whether or not a joint operation is involved.

## CLASSIFICATION OF RAILWAY ACCIDENTS.

6. Primary Groups and Their Definitions.—Reportable railway accidents are divided into three primary groups:

- Group I.—Train accidents.
- Group II.—Train-service accidents.
- Group III.—Nontrain accidents.

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## INTERSTATE COMMERCE COMMISSION.

Group I.—Train Accidents.—This group covers accidents, with or without casualties, arising in connection with the operation or movement of trains, locomotives, or cars that result in damage to equipment or other railway property in excess of \$150 (including cost of clearing wreck, in which should be included the local expense of transferring lading made necessary as the result of an accident, but not damage, if any, to the lading). (See Group I below.)

Group II.—Train-service Accidents.—This group covers accidents arising in connection with the operation or movement of trains, locomotives, or cars that result in casualties to persons, but not in damage to equipment or other railway property in excess of \$150 (including cost of clearing wreck as indicated in the preceding paragraph). (See Group II, page 30.)

Group III.—Nontrain Accidents.—This group covers accidents that do not result directly from the operation or movement of trains, locomotives, or cars.

Accidents in connection with the operation of vessels are also considered nontrain accidents, and resulting casualties are reportable when the vessels are operated as an adjunct to train service. (See Group III, page 29.)

## GROUP I—TRAIN ACCIDENTS.

7. Classification of Train Accidents.—Train accidents should be classified under the following heads:

- Collisions (Class C).
- Derailements (Class D).
- Locomotive-boiler accidents (Class B).
- Other locomotive accidents or failures (not resulting in a collision, derailment, or boiler accident) (Class L).
- Miscellaneous train accidents (Class M).

If a single accident is classifiable under two or more of the foregoing heads, it should be classified in accordance with its primary class.

8. Collisions (Class C).—A collision is a violent impact of a train, locomotive, or car with some other train, locomotive, or car while both are on rails. Accidents, however, in which cars, not in suitable condition to withstand common train usage, that, when coupled in trains, may be damaged through ordinary train movements, should be classified as miscellaneous train accidents, and not as collisions. (Accidents caused by trains, etc., striking hand cars, section motor cars, and like roadway machines, or bumping posts, are not classifiable as collisions, but otherwise according to circumstances.)

Reports of collisions, in addition to furnishing the information required by sections of these rules having general application, should describe briefly the method of operation in use for the track involved.

stating whether the block system was in use; and, if in use, whether manual, controlled manual, automatic, etc.

For collisions involving any question of train orders, the information should show whether they were on Form "19" or Form "31" (A. R. A. Standard Code of Train Rules).

In the case of a collision, the number of main tracks in use in the locality of the accident should be stated.

Collisions should be classified as follows:

(a) *Rear-end collisions*.—A rear-end collision is a collision in which the trains or locomotives involved are bound in the same direction on the same track.<sup>1</sup>

(b) *Head-on collisions*.—A head-on collision is a collision in which the trains or locomotives involved are bound in opposite directions on the same track.<sup>2</sup>

(c) *Broken-train collisions*.—A broken-train collision is a collision in which a moving train breaks into parts and a violent impact of two or more of the uncoupled parts of the same train occurs, or one or more of the parts collide with another train, locomotive, or car. Collisions in which the equipment involved is employed in a switching movement are not to be included in this class.

(d) *Side or rubbing collisions*.—This class does not include collisions of trains with cars classifiable under (g) or collisions of equipment employed in switching movements classifiable under (A). An accident caused by parts of equipment on one track coming in contact with equipment on a parallel track should not be classified as a collision, but as a miscellaneous train accident, unless a derailment occurs.

(e) *Crossing collisions at private railway crossings*.—The term "crossing collisions at private railway crossings" is used herein to mean collisions occurring at crossings or junctions on the carriers' right of way, involving trains, locomotives, or cars operated on the intersecting tracks not on public streets, highways, or other public property.<sup>3</sup>

(f) *Crossing collisions at public highway crossings*.—The term "crossing collisions at public highway crossings" is used herein to mean collisions occurring at railway grade crossings on public streets, highways, or other public property, involving trains, locomotives, or cars operated on the intersecting tracks. This class does not include accidents due to striking trolley cars, automobiles, or other vehicles, classifiable under sections 9 (j), 12 (a), or 13 (A).<sup>4</sup>

<sup>1</sup> The time-table or schedule direction should govern the classification of collisions in classes (a) and (b) if at the time of the accident either of the trains or locomotives is at rest or if its incidental movement temporarily differs from its schedule direction.

<sup>2</sup> Crossing collisions covered by classes (e) and (f) should be reported by each carrier affected. Items of damage and casualties to persons should be reported in the same manner as specified in connection with "joint operation" accidents, sec. 16 and 17, p. 15.

(g) *Collisions of trains with cars not in trains*.—This class does not include collisions of trains with cars, subject by train rules to the protection afforded to trains, which should be classified as (a), (b), (c), (d), (e), or (f), in accordance with the circumstances of the particular case.

(A) *Switching collisions*.—The term "switching collisions" is used herein to mean collisions occurring to equipment being switched, as in making or breaking up trains, shifting or setting out cars, etc., including accidents to locomotives involved in such service. A collision should not receive this classification when two or more locomotives, trains, or cuts of cars are involved unless both or all such units of equipment are employed in switching movements at the time of accident, but it should be classified as (a), (b), (c), (d), (e), (f), (g), or (i), in accordance with the circumstances of the particular case.

(i) *Collisions not elsewhere classifiable*.—This class includes collisions between light locomotives moving to or from roundhouses; also collisions between a locomotive and cars of a train or cut of cars occurring in recoupling the locomotive after it has been cut off to take water, for repairs, etc., but does not include collisions between locomotives and cars while engaged in switching movements as described in paragraph (A).

9. *Deraillments (Class B)*.—In reporting deraillments the information required by provisions of these rules having general application should be furnished, and there should be indicated in particular, by initials and number, or name, both the equipment causing the derailment and the equipment derailed. If a derailment is due to the breaking of a rail, a Form R in addition to a Form T should be supplied. (See sec. 18, p. 23.)

Deraillments should be classified as follows:

(a) *Deraillments due to defects in or failures of power brake apparatus, hose, etc.*—This class covers deraillments resulting from defects in or failures of power brakes or any apparatus or appurtenances connected therewith, including air hose and hose couplings, with the exceptions indicated in (c). (See sec. 5, p. 42, of code.)

(b) *Deraillments due to defects in or failures of couplers*.—This class covers deraillments resulting from defects in or failures of couplers and such of their mechanical parts as may be directly involved in the interlocking of two couplers, including, for example, the knuckle, knuckle pin, lock block, shank, etc., but not such apparatus as the coupler yoke, coupler or drawbar key, draft springs, friction plates, etc., or other parts back of the shank. (See sec. 7, p. 42, of code.)

(c) *Deraillments due to other defects in or failures of locomotives or cars*.—This class covers deraillments due to failures of loco-



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tives or cars, except those specifically provided for in classes (a) and (b), such as those resulting from broken or otherwise defective wheels (including cases in which wheels are broken as a result of defects in brake apparatus or other causes), tires, axles, journals, trucks, brake beams, brake rigging, draft gear (including coupler yoke, coupler or drawbar key, and other parts of draft rigging back of shank), side bearings, arch bars, car bodies, etc. (See secs. 1, 2, 3, 4, 6, 8, and 9, pp. 41, 42, and 43, of code.)

(d) *Deraillments due to defects in track, bridges, switches, and signals, or other defects in roadway.*—This class covers derailments such as those resulting from broken rails, spread rails, soft track, defective ties, rough or irregular track, etc., that occur in the course of ordinary wear and weather conditions but does not include derailments due to such conditions as are outlined for class (e). (See secs. 1 to 6, pp. 43 and 44, of code.)

(e) *Deraillments due to accidental obstructions or defects in track.*—This class covers derailments such as those due to weakening or destruction of bridges or other structures by fire; to animals, vehicles, etc., on track at places other than at public highway grade crossings; to landslides; to snow or ice on or in track; to floods; to washouts at culverts or other places; to coal, ballast, or parts of equipment or lading of another train falling on track or wedging in switch; and to other unforeseen happenings or obstructions of similar character. Parts of the equipment or lading of a train which, by falling on the track, cause a derailment of the same train, are not to be regarded as obstructions with relation to this class, but a derailment so caused should be properly assigned to class (a), (b), (c), or (f). (See items 4401 to 4411, sec. 4, p. 45, of code.)

(f) *Deraillments due to obstructions at public highway crossings.*—This class covers accidents at public highway grade crossings due to trains, locomotives, or cars striking or being struck by trolley cars, automobiles, or other vehicles, or objects other than hand cars or other railway tools or material, which result in reportable derailments. State all material facts, including whether injured persons were pedestrians, occupants of trolley cars, automobiles, or other vehicles, etc.; the nature of protection, if any, afforded at the crossing at the time of an accident; that is, whether crossing gates, watchman, audible or visual signals (not stationary signs), etc.; the kind of vehicle or object struck and whether the view of the crossing was obscured by buildings, trees, cars, or other objects. (See also secs. 12 (a) and 13 (A).) (See items 4412 to 4422, sec. 4, p. 45, of code.)

(g) *Deraillments due to negligence, mistake, or misconduct of trainmen or other employees.*—Derailments should not be reported in this class unless the direct or immediate cause was negligence, mistake, or

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misconduct of railway employees, such as error in throwing switches, misunderstanding of or error in giving signals, failure of section men to protect when replacing rails, excessive speed in violation of instructions, etc. Derailments due to contributory negligence, such as those caused by the failure of inspectors or track walkers to discover defects in equipment or track, should not be included in this class, but should be reported in their proper classes. (See secs. 1 to 8, pp. 38, 39, and 40, of code.)

(h) *Deraillments due to mistake or misconduct of persons other than employees.*—This class covers derailments such as those resulting from obstruction of track, misplacement of switches, tampering with brakes, etc., by persons other than employees. (See secs. 2 and 3, p. 45, of code.)

(i) *Deraillments due to ascertained causes not classifiable under any preceding head.*—This class also includes derailments due to two or more immediate causes. The causes of derailments includable in this class should be clearly and fully described. (See sec. 1 and items 4423 to 4488, sec. 4, p. 45, of code.)

(j) *Deraillments due to unknown causes.*—If any derailment is reported under this head, the reason for so classifying it should be given. The report should show what search or investigation has been made to find the cause of the derailment, and if the cause can not be assigned with certainty, that fact should be stated and the probable cause indicated, if practicable. (See sec. 5, p. 46, of code.)

10. *Locomotive-Boiler Accidents (Class B).*—In reporting locomotive-boiler accidents, complete information should be given, and in cases of explosions resulting from low water in the boiler it should be stated whether the condition was due to negligence of the locomotive crew or to an improper or defective condition of appurtenances used to supply water to the boiler or to indicate the water level therein. (For locomotive-boiler defects, see sec. 1, p. 41, of code.)

Locomotive-boiler accidents should be classified as follows:

(a) *Locomotive-boiler shell explosions.*

(b) *Crown sheet explosions due to low water where no contributory causes (negligence, or defects in or failures of equipment) are found.*

(c) *Crown sheet explosions due to low water where contributory causes (negligence, or defects in or failures of equipment) are found.*

(d) *Other explosions.*—This class covers explosions due to stay bolts or crown stays giving way, water foaming, and all other explosions not includable in classes (a), (b), and (c).

(e) *Accidents due to defects in or failures of tubing or pipes subject to steam pressure.*—This class covers accidents due to defects in or failures of flues, arch tubes, water bars, superheater tubes, etc.

(f) *Other locomotive-boiler accidents.*

## MONTHLY REPORTS OF RAILWAY ACCIDENTS.

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11. *Other Locomotive Accidents (Class L).*—This class covers train accidents resulting from defects in or failures of locomotives or tenders, not classifiable as collisions, derailments, or locomotive-boiler accidents. In reporting an accident under this head, describe and give location of the part involved, state the nature of the defect or failure, and explain, so far as may be ascertainable, the cause of, or the conditions or circumstances responsible for or contributing to, the failure.

Other locomotive accidents should be classified as follows:

(a) *Accidents due to defects in or failures of locomotive cylinders.*—This class covers accidents due to defects in or failures of locomotive cylinders or cylinder heads, but does not include pistons or other parts.

(b) *Accidents due to defects in or failures of driving gear and machinery of locomotives.*—This class covers accidents due to defects in or failures of driving gear and machinery of locomotives, but not of locomotive tenders.

(c) *Accidents due to defects in or failures of wheels and axles of locomotives.*—This class does not include accidents resulting in derailments, which should be specifically classified as such.

(d) *Accidents due to defects in or failures of parts of locomotive tenders.*—This class covers accidents due to defects in or failures of locomotive tenders or parts or appurtenances of tenders when no derailment results.

(e) *Miscellaneous locomotive accidents.*

12. *Miscellaneous Train Accidents (Class M).*—This class covers all train accidents other than collisions, derailments, locomotive-boiler accidents, or other locomotive accidents, classified as follows:

(a) *Accidents at public highway crossings.*—This class covers accidents at public highway grade crossings due to trains, locomotives, or cars striking or being struck by trolley cars, automobiles, or other vehicles, or objects other than hand cars or other railway tools or material, which result in damage to railway property but not in derailments. State all material facts, including whether injured persons were pedestrians, occupants of trolley cars, automobiles, or other vehicles, etc.; the nature of protection, if any, afforded at the crossing at the time of an accident; that is, whether crossing gates, watchman, audible or visual signals (not stationary signs), etc.; the kind of vehicle or object struck, and whether the view of the crossing was obscured by buildings, trees, cars, or other objects. (See also secs. 9 (f) and 13 (k).)

(b) *Other miscellaneous train accidents.*—This class covers all train accidents not elsewhere provided for, such as accidents in which cars, not in suitable condition to withstand common train usage, that,

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## INTERSTATE COMMERCE COMMISSION.

when coupled in trains, may be damaged, but not derailed, through ordinary train movements; accidents caused by trains, etc., striking hand cars, section motor cars and like roadway machines, or bumping posts, that result in no derailment, etc.

## GROUP II—TRAIN-SERVICE ACCIDENTS.

13. *Classification of Train-Service Accidents (Class S).*—In reporting train-service accidents, there should be furnished all pertinent information required by sections of these rules having general application and particularly:

Whether engine man or other employee contributed to the cause of the accident and, if so, in what manner and to what extent. Whether person injured caught a foot in frog, switch, or guard rail, and, if injured in such a manner, whether safety blocks were in use and what kind.

Whether the presence of fog, snow, or ice contributed to the accident.

Whether failure of brakes or other parts of equipment contributed to the accident.

Train-service accidents should be classified as follows:

(a) *Accidents to employees while engaged in coupling or uncoupling locomotives or cars* (see sec. 6-A, p. 47, of code).—State in particular:

Name and style of couplers or uncoupling devices and, if defective, describe in detail the nature and extent of defect.

If employee was killed or injured while between locomotives or cars, explain why he was thus in jeopardy.

(b) *Accidents to employees while engaged in coupling or uncoupling air hose (or turning angle cocks in connection therewith), steam hose, and safety chains* (see sec. 6-B, p. 47, of code).—State in particular whether hose or couplings were defective, and, if defective, describe the nature and extent of the defect.

(c) *Accidents to employees while operating locomotives* (see sec. 6-C, p. 47, of code).—If locomotive parts or appurtenances were defective, describe in detail the nature and extent of defect. This class also includes employees other than enginemen and firemen who may be assisting in the operation of locomotives.

(d) *Accidents to employees while operating hand brakes* (see sec. 6-D, p. 48, of code).—If hand brake was defective, state type and describe in detail the nature and extent of defect.

(e) *Accidents to employees while operating switches* (see sec. 6-E, p. 49, of code).—If switch was defective, describe in detail the nature and extent of defect.

(f) *Accidents to persons on moving cars or locomotives resulting from coming in contact with any structure or fixture above or at side*

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## MONTHLY REPORTS OF RAILWAY ACCIDENTS.

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*of track* (see sec. 6-F, p. 49, of code).—This class covers accidents to all classes of persons resulting from coming in contact with fixed structures, such as bridges, tunnel walls or roofs, platforms, stock chutes, signals, signs, mail cranes, water tanks or penstocks or spouts, coaling stations including chutes or aprons, standpipes, permanently located wires or pipes, etc. State all material facts, including, in particular, when applicable:

Extent of injured person's acquaintance with the road at and in the vicinity of the place of accident; and  
Distance between top of locomotive or car and obstruction; or  
Distance between side of locomotive or car and obstruction.

(g) *Accidents to persons while getting on or off cars or locomotives* (see sec. 6-G, p. 49, of code).—This class covers not only accidents to persons while getting on or off cars or locomotives in the usual manner, but also, in general, accidents to employees in jumping from trains, locomotives, or cars, and to other persons in jumping from moving trains, or in jumping through car windows to escape from custody, or while mentally deranged, or with suicidal intent, etc.

*Note*.—In cases of reportable train accidents in which employees or other persons jumped from cars or locomotives in anticipation of the accidents and thereby received a reportable injury without coming into contact with wreckage, the injury so incurred should be reported separately and included in class (g), and cross references made in the Monthly Report between the report of it and the report covering the train accident.

(h) *Accidents at highway grade crossings* (see sec. 6-H, p. 50, of code).—This class covers accidents at public highway grade crossings due to trains, locomotives, or cars striking pedestrians or colliding with trolley cars, automobiles, or other vehicles, or objects other than hand cars or other railway tools or material, when such accidents result in reportable casualties but not in damage to railway property in excess of \$150, including cost of clearing wreck. State all material facts, including whether injured persons were pedestrians, occupants of trolley cars, automobiles, or other vehicles, riding bicycles or motor cycles, etc.; the nature of protection, if any, afforded at the crossing at the time of an accident; that is, whether crossing gates, watchman, audible or visual signals (not stationary signs), etc.; the kind of vehicle or object struck, and whether the view of crossing was obscured by buildings, trees, cars, or other objects. (See also secs. 9 (f) and 12 (a).)

(i) *Struck or run over by cars or locomotives not classifiable above* (see sec. 6-I, p. 51, of code).

(j) *Miscellaneous train-service accidents not elsewhere classifiable* (see sec. 7-J, p. 51, of code).

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## INTERSTATE COMMERCE COMMISSION.

## GROUP III.—NONTRAIN ACCIDENTS.

14. *Classification of Nontrain Accidents*.—This group covers:

Accidents to employees that do not occur directly in connection with the operation or movement of trains, locomotives, or cars; as, for example, accidents occurring in connection with the construction, repair, or painting of buildings, tracks, or other structures or equipment (except running repairs made by trainmen on the road); with the movement, by shop, enginehouse, or other industrial employees, of locomotives or cars in shops, enginehouses, on repair tracks, etc., when in connection with industrial work; or the loading or unloading of cars at station or freight-house platforms, on yard tracks, or elsewhere; and also

*Accidents to all classes of persons while on right of way or other railway premises, that do not occur directly in connection with the operation or movement of trains, locomotives, or cars, except such cases as are excluded by the provisions of sec. 3 of General Instructions, p. 12.*

*Note*.—Accidents in which injuries are received by trackmen, bridge and building men, and other classes of employees or other persons and which are caused by trains, locomotives, or cars striking hand cars, tools, or other objects, should be appropriately reported as train accidents or train-service accidents.

The classification of persons to whom reportable casualties occur in nontrain accidents and the classification of such accidents should be in accordance with the "Instructions" given in "Form V."

## FORM AND ARRANGEMENT OF REPORTS.

15. *Forms Used and Duplicate Reports*.—Monthly reports of railway accidents (including rail failures causing train accidents) should be made on forms provided by the Interstate Commerce Commission, or on forms identical therewith in arrangement, size, and in color and weight of paper, and every reporting carrier is required to retain in its files a duplicate of each report rendered to the commission. The forms provided, which are of four kinds, are designated as Forms V, T, R, and F.

Each sheet of each report should show in the appropriate place the name of the company for which it is filed, the month and year to which the report relates, together with all other particulars called for by the form. Each sheet of each report following Form V should bear the autograph signature of a responsible officer or employee.

16. *Form V (Verification)*.—A report should be made on this form each month, even though no reportable (train, train-service, or non-train) accident occurred during the month covered. Such report should include an oath or verification, made by the proper officer of the reporting carrier, as provided for attestation on Form V, which should show the number of train and train-service accidents that



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occurred during the month for which the report is made, and the number of sheets, inclusive of Form V. If no reportable accident occurred during the month, that fact should be stated on this form. Form V should also show the total number of locomotive-miles run during the month, computed in accordance with the Interstate Commerce Commission's Classification of Train-miles, Locomotive-miles, and Car-miles. If any reportable nontrain accidents occurred during the month, they should be reported in the tables provided on Form V, but if none occurred, that fact should be stated as required.

17. **Form T (Train and Train-Service Accidents).**—A separate Form T sheet should be used for each reportable train accident or train-service accident and should show the required particulars concerning the accident.

18. **Form R (Rail Failures).**—In case of reportable train accidents resulting from rail failures, particulars of the failures should be reported on Form R, and all the information called for on that form should be furnished additionally to that required on Form T.

19. **Form F (Subsequent Fatalities).**—If, as the result of an injury, a person dies more than 24 hours after the occurrence of the accident, the casualty should be reported on a Form T as an injury, with full details as required by the provisions of the form, and in addition, a memorandum of the death should be given on Form F in accordance with the requirements of that form. This additional report is to be made in connection with the report for the month in which the accident occurred, if practicable, otherwise it should separately accompany the first monthly report filed after the death has come to the knowledge of the carrier. A single Form F may contain reports of more than one such fatality, provided all persons included therein were injured during the same month. A Form F is not required in relation to a nontrain accident.

20. **Classification Symbols.**—Symbols indicating the class of train accidents or of train-service accidents and the class of persons involved should be entered in the appropriate spaces on Form T as follows:

**Class of accident.**—Sheets carrying reports of collisions are to be marked C; those relating to derailments, D; those relating to locomotive-boiler accidents, B; those relating to other locomotive accidents (not resulting in collisions or derailments), L; those relating to miscellaneous train accidents, M; and those relating to train-service accidents, S. To each of these primary class symbols should be added the proper small letter to indicate the subclass covering the accident. (See secs. 8 to 13.)

**Class of person.**—The designation of the class of person should include the applicable capital letter preceding the name of the class,

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to which should be added the number of the "Reporting Division," or the small letter applicable to the subclass, with such other descriptive detail as may be appropriate. (See sec. 31.)

21. **Arrangement and Numbering of Sheets.**—All the forms in a monthly report should be arranged in the order V, T, R, and F. All Forms T should be further grouped in accordance with the character of the accidents and arranged in the order C, D, B, L, M, and S, and subgrouped in order by subclasses; as, for example, first all of C-a, followed by all of C-b, followed in turn by all of C-c, etc., throughout the series. All sheets are to be numbered consecutively, beginning with No. 1 for Form V each month. When properly arranged and numbered, all sheets, including Form V, should be securely fastened.

In no case should the report for any month include a Form T sheet completed for an accident that did not occur during the month covered by the report. Should it be discovered by a carrier that the report of a particular accident on a Form T has, through mistake or otherwise, been improperly omitted from its regular monthly accident report, the sheet covering such accident should be separately transmitted to the Bureau of Statistics, with a suitable letter of explanation.

## PARTICULARS TO BE REPORTED.

22. **General.**—Such of the following provisions as apply in any case should be carefully observed in the preparation of reports of both train and train-service accidents, and wherever a pertinent requirement is not complied with the report should explain the omission.

Reporting officers should endeavor to supply sufficient information in each report to enable the Interstate Commerce Commission to classify all data pertaining to each accident in accordance with the codes in the Appendix beginning on page 37.

In cases of train accidents it is necessary to show whether the accidents were attributable to—

Negligence of employees.

Defects in or failures of equipment.

Defects in or improper maintenance of way and structures.

Miscellaneous causes.

The report of an accident should give, so far as pertinent, particulars of the accident, such as time, place, weather, light, persons involved, equipment and other property damaged or involved, causes of accident, so far as ascertained (and if not ascertained, the report should indicate what effort has been made to ascertain causes and what seems to have been the most probable cause), description and extent of the damage caused, and suggested improvements in procedure, plant, and equipment for the prevention of similar accidents, cause and effects of fire, if any; experience and (whenever significant) condition of employee who caused or is believed or supposed to have

caused the accident. The report should indicate whether or not such employee had been continuously on duty for more than 16 hours at the time of the accident or had had less than 8 hours' rest before going on duty.

Unless manifestly without importance in the matter, quote the operating rule or rules bearing on the case, or give an essential abstract of the pertinent regulations, and indicate wherein the employee at fault, if any, violated the requirements.

23. *Visibility*.—The report should give sufficient particulars to show whether vision was obstructed or obscured and, if either, from what cause and to what extent.

24. *Place*.—In reporting place, the name of the State in which the accident occurred and the nearest station should be reported; also the direction and estimated distance from such station, unless the accident occurred directly at a station or in a yard, in which latter case the yard should be named or described.

25. *Definition of Yard*.—By the word "yard," as herein used, is meant a system of auxiliary tracks within defined limits provided for the making up of trains, storing of cars, and other purposes, over which movements not authorized by train order or time-table may be made, subject to prescribed signals and regulations. Sidings used exclusively as passing track are not included; nor is the main line within yard limits, and if an accident occurs on or results in fouling a main line so located that fact should be stated.

26. *Trains—Description and Particulars*.—For the purpose of reporting railway accidents a train may be defined as a locomotive, or more than one locomotive coupled, with or without cars, displaying markers. Hand cars, section motor cars, and like roadway machines, are not to be regarded as "cars," within the meaning of this definition.

#### DESCRIPTION.

In reporting accidents involving trains, locomotives, or cars, sufficient particulars should be given to show definitely to which of the six classes of service described below the equipment was assigned. Definite information is required in this respect and descriptive terms of local application, such as "milk," "transfer," "mine," etc., should not be used to designate classes of trains. In connection with this matter, a light engine involved in an accident should be classified as belonging to that class of service to which its assignment at the time of accident was related.

*Transportation service—Freight*.—This class includes trains run between terminals or stations for the purpose of transporting revenue freight; also those transporting only company freight when statistics of ton-miles are kept for the freight thus transported; also trains consisting of empty freight cars and trains consisting of a

locomotive and a caboose running light in connection with such service. When milk, baggage, or other cars (not passenger cars or combination passenger and other cars) are hauled in a freight train, they do not change its class. Freight trains that regularly haul no passenger service equipment but transport passengers in a caboose should be classified as freight trains, as should also freight trains temporarily using a passenger car in place of a caboose, or that only occasionally contain a car devoted to passenger traffic.

*Transportation service—Passenger*.—This class includes trains run for the purpose of transporting passengers, baggage, mail, milk, express, or any combination of these; also trains consisting of dead-head passenger equipment. When one or more cars, other than regular passenger-train cars, are hauled incidentally in a passenger train, they do not change its class.

*Transportation service—Mixed*.—This class includes trains containing both freight-train cars moved in connection with freight traffic and passenger-train cars moved in connection with passenger traffic. The incidental omission of either freight-train or passenger-train cars from a regularly scheduled mixed train does not change its class.

*Transportation service—Special*.—This class includes revenue-earning trains not provided for in the three foregoing classes, such as chartered trains paid for either on the basis of a rate per mile run or a lump sum for the train, circus and theatrical trains run under contracts calling for payment of specified amounts for transportation between designated stations, chartered trains for the Federal or State Governments carrying troops, munitions of war, camp outfits, etc.

*Work service*.—This class includes nonrevenue trains run in the administration and upkeep service of the carrier, such as official trains, inspection trains, pay trains, special trains running with company fire apparatus to save the carrier's property from destruction, and trains run for the purpose of transporting the carrier's employees to and from work when no transportation charge is made; wrecking trains; construction and upkeep trains run in connection with maintenance and construction work, the cost of operating such trains being chargeable to the appropriate construction or maintenance accounts for rail-line operations; material and supply trains run for the purpose of distributing ties, rails, other track material, ballast, bridge material, and other materials and supplies at stations, towers, section houses, and other points; trains run for picking up and concentrating such material; and trains run for distributing material and supplies for use in connection with operation.

*Notes*.—Work service trains do not include solid fuel trains and other freight trains laden with company material and running from station to station under the same operating conditions as ordinary revenue freight trains.

**Yard service.**—This class of service includes the handling of equipment being switched or used in switching other equipment, as, for example, in making or breaking up trains, serving industrial tracks, storing, weighing, or classifying cars, and other like operations, that may be made without time-table or train order authority, subject to prescribed signals. Operations incidental to a road run when performed by a road train crew are not included.

**PARTICULARS.**

There should be given for each train involved—

Class of service as indicated above.

Number of train and locomotive.

Time-table direction in which bound at the time of accident (east, west, north, or south).

Estimated speed in miles per hour (but if train was at rest, it should be so stated).

When pertinent, state whether the train was being operated in accordance with the act of Congress of March 2, 1893, requiring the use of air brakes, how many cars were and how many were not equipped with air brakes, and on how many the air brakes were operative. State whether the air brakes on the locomotive were operative. State the number of loaded cars and the number of empty cars in the train; gross weight of train; number of locomotives pushing or pulling train; number of brakemen on train; where and when locomotives, cars, and brakes were last inspected; and the number of hand brakes used (if any), together with the reason for their use. Whenever material, state also under what orders the train was moving and what were its rights of track at the particular time and place of the accident.

**27. Defective Equipment.**—In the description of equipment defects that cause or contribute to either a train or a train-service accident, the report should show, whenever significant—

Number and initial of car.

Manufacturer and type of equipment or part.

Weight, number, and other identifying marks.

Year of manufacture and year of placing in service.

When, where, and by what class of employee the equipment was last inspected, whether any defects were noted, and, if any, what remedies were applied.

In reporting accidents involving appliances subject to the Federal safety appliance acts, the Commission's Classification of Safety Appliance Defects should be followed.

Describe the defective equipment involved with sufficient particularity to permit its classification in the code of "Defects in or Fail-

ures of Equipment," in the Appendix on page 41, and furnish information as follows:

**Locomotive and parts:**

**Description—**

Type, as simple, compound, articulated, etc.

Wheel arrangement.

Weight on drivers and total weight ready for service.

**Parts—**

Firebox and attachments.

Boiler and attachments.

Cylinders and steam chests.

Reciprocating parts.

Headlight.

Pilot.

Drivers.

Truck wheels.

Other parts of running gear as enumerated under cars.

Miscellaneous parts, naming them.

In case of electric locomotives, give similarly detailed information so far as practicable.

**Cars and parts:**

Wheels.

Axles and journals.

Boxes.

Truck frames and parts, naming them.

Couplers.

Draft gear and parts, naming them.

Brakes—

(1) Power.

(2) Hand.

Underframing.

Car sides.

Car ends.

Car roofs.

Miscellaneous parts, naming them.

Floating equipment: Give particulars.

**28. Defective Way and Structures.**—In statements covering defects or failures of rails, rail fastenings, switches, signal or other apparatus that caused or contributed to an accident, the report should show, whenever significant:

Manufacture and type of apparatus or part.

Weight, number, and other identifying marks.

Year of manufacture and year of placing in service.

When and by what class of employee inspected, whether any defects were noted, and, if any, what remedies were applied.

Describe the defective structure or parts with sufficient particularity to permit a classification in the code of "Defects in or Improper Maintenance of Way and Structures," in the Appendix on



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page 43, and give sufficient information to permit identification under the following heads:

Roadbed, including embankments, cuts, ditches, drainage, etc.  
Bridges, trestles, and culverts.

Ties, stating whether wood, steel, concrete, or other material, and, if wood, state kind and whether treated or untreated.

Rails, giving information required by Form R. If a rail failure occurs at a joint or within the space covered by angle or splice bars or at holes drilled for bonding or other purposes care should be taken to determine whether the joint or bolt or bonding holes or insulation caused or contributed to such failure, and, if determined, full particulars should be given.

Rail fastenings.

Switches.

Signal apparatus.

Clearances—

Overhead.

Side.

Buildings (describing each and indicating its ordinary use).

29. *Damage.*—A brief description of the damage (if any) resulting to the equipment, way, structures, and other property of the reporting carrier should be furnished, as well as the expense occasioned thereby in the case of train accidents. A statement of the amount of damage is not required for train-service or nontrain accidents. Damage to the property of railway companies other than the reporting carrier should also be described, so far as practicable, and if such property is railway equipment it should be described with the same particularity as would be appropriate were it the property of the company making the report.

In determining the amount of damage to railway property (including damage to foreign cars) the cost of clearing wreck should be included, but not any amount because of damage to freight or baggage, stock on right of way, or to other property of noncarriers, or because of personal injuries. The amount reported should be subdivided so as to show damage to equipment, to other railway property, and cost of clearing wreck (including the local expense of transferring lading made necessary as a result of the accident). If the amount of damage is not known at the time the report is filed with the commission, it should be estimated as accurately as practicable, and the fact that it is estimated should be stated.

30. *Casualties—Classification and Particulars.*

*Classification.*—In reporting casualties to persons the following distinctions should be observed:

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*Killed.*—Any person killed in an accident at the time of its occurrence, or so seriously injured as to die within 24 hours thereafter, should be reported as "killed."

*Note.*—See section 19 for instructions relative to injuries that subsequently result in death.

*Injured.*—Employees so seriously injured as to be incapacitated from performing their ordinary duties for more than 3 days, in the aggregate, during the 10 days immediately following the accident, should be reported as injured. This rule applies both to employees on duty and to those claimed as not on duty, but does not apply to employees claimed as passengers or trespassers.

Other persons should be reported as injured if the injury is sufficient, in the opinion of the reporting officer, to incapacitate the injured person from following his customary vocation or mode of life for a period of more than one day. This rule applies also to employees claimed as passengers or trespassers.

*Particulars.*—Personal injuries should be sufficiently described to indicate—

The part of body injured and the specific nature and extent of the injury received (which should be reported in sufficient detail to enable the Interstate Commerce Commission to classify the injury in accordance with the code on page 54. Indefinite terms such as "mashed," "crushed," "injured," "hurt," etc., should not be used). In case of loss of any part, the extent should be indicated, as, for example, tip of index finger of right hand, two middle fingers to second joint of left hand, left arm to elbow, loss of right eye, etc. The actual number of days of disability if ascertained at the time the report is made but, if the disability has not terminated by that time or is not ascertainable, an estimate of the number should be shown in the appropriate column on Form T, or the absence of an estimate fully explained. The degree to which the person is maimed, if at all.

*Note.*—When the injury is of a permanent nature that fact may be stated in lieu of the number of days' disability.

CLASSIFICATION OF PERSONS.

31. *Classification.*—For the purpose of monthly reports, persons involved in railway accidents other than nontrain accidents should be named and sufficient particulars of each person should be given to permit an appropriate classification among the following classes:

(A) *Employees on duty.*—An employee should be considered on duty when he is, at the request or direction of the carrier, rendering

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service or holding himself in readiness at his post of duty. He is not to be considered on duty while relieved from service and from responsibility for the performance of service, or while willfully and improperly absent from his post of duty. The classification of employees on duty is to be determined by the character of the work on which they are engaged, or to which they may be detailed, at the time of the accident. If this is different from that of their usual and customary duties, particulars should be given.

If any person killed or injured in an accident is known or believed to be an employee of another carrier that fact should be stated and appropriate class symbols indicating the customary occupation of the employee, with the name of the carrier by which he is employed, should be entered.

(B) Employees not on duty.—This class is restricted to employees lawfully on the premises of the carrier. Whenever an employee not on duty is injured, the report should explain the occasion of the employee's presence at the place of the accident. Employees trespassing should be included in Class (F) as trespassers. Employees (including trainmen deadheading between terminals, etc.) when traveling as passengers should be included in Class (C) as passengers.

The following list of 148 Reporting Divisions into which all the distinctive classes of railway positions are grouped is derived from the "Rules Governing the Classification of Steam Railway Employees and Reports of Their Service and Compensation" prescribed by the Interstate Commerce Commission to be effective on July 1, 1931. The returns on all accident report forms should, with respect to the classification of employees, be made in conformity with these Reporting Divisions. For each employee reported on Form T as killed or injured there should be given the correct number of the Reporting Division to which the employee is properly assignable, and also the pay-roll or distinctive class title of his occupational position. The letter (A) or (B) should be used to indicate respectively whether he was on or off duty at the time of accident. Abbreviations or contractions may be used in the indication of position titles, if their meaning is sufficiently clear. For example, to indicate a casualty sustained by a road freight brakeman (through freight) on duty, the proper designation of class of person on Form T would be A-137, Road Freight Brakeman (through freight), while that of a casualty incurred in a train or a train-service accident by a buffet car porter on duty would be A-122, Buffet Car Porter.

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## List of reporting divisions for employees.

Division No.	Reporting division.
I.—Executive, officials, and staff assistants.	
1	Executive, general officers, and assistants.
2	Division officers, assistants, and staff assistants.
II.—Professional, clerical, and general.	
3	Architectural, chemical, and engineering assistants (A).
4	Architectural, chemical, and engineering assistants (B).
5	Subprofessional engineering and laboratory assistants.
6	Professional and subprofessional legal assistants.
7	Supervisory or chief clerks (major departments).
8	Chief clerks (minor departments) and assistant chief clerks and supervising cashiers.
9	Clerks and clerical specialists (A).
10	Clerks (B).
11	Clerks (C).
12	Mechanical device operators (office).
13	Stenographers and secretaries (A).
14	Stenographers and typists (B).
15	Storekeepers, sales agents, and buyers.
16	Ticket agents and assistant ticket agents.
17	Traveling auditors or accountants.
18	Telephone switchboard operators and office assistants.
19	Messengers and office boys.
20	Elevator operators and other office attendants.
21	Lieutenants and sergeants of police.
22	Patrolmen.
23	Watchmen (without police authority).
24	Supervising traffic agents.
25	Traffic agents, advertising and development agents.
26	Fire prevention, smoke, and time-service inspectors, and office building superintendents.
27	Claim agents and claim investigators.
28	Real estate and tax agents and investigators.
29	Examiners, instructors, and special investigators.
30	Miscellaneous trades workers (other than plumbers).
31	Motor vehicle and motor car operators.
32	Teamsters and stablemen.
33	Janitors and cleaners.
III.—Maintenance of way and structures.	
34	Roadmasters and general foremen (M. of W. and S.).
35	Assistant general foremen (M. of W. and S.).
36	Supervising maintenance of way inspectors and scale inspectors.
37	Maintenance of way inspectors.
38	Bridge and building gang foremen (skilled labor, M. of W. and S.).
39	Bridge and building carpenters.
40	Bridge and building ironworkers.
41	Bridge and building painters.
42	Masons, bricklayers, plasterers, and plumbers.
43	Skilled trades helpers (M. of W. and S.).
44	Regular apprentices (M. of W. and S.).
45	Portable steam equipment operators (M. of W. and S.).
46	Portable steam equipment operator helpers (M. of W. and S.).
47	Pumping equipment operators (M. of W. and S.).
48	Gang foremen (extra gang and work-train laborers).
49	Gang foremen (bridge and building, signal and telegraph laborers).
50	Gang or section foremen.

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List of reporting divisions for employees—Continued.

Division No.	Reporting division.
III.—Maintenance of way and structures—Continued.	
81	Laborers (extra gang and work-train).
82	Track and roadway section laborers.
83	Maintenance of way laborers (other than track and roadway) and gardeners and farmers.
84	General foremen and supervising inspectors (signal, telegraph, and electrical transmission).
85	Assistant general foremen (signal, telegraph, and electrical transmission) and signal and telegraph inspectors.
86	Gang foremen (signal and telegraph skilled trades labor).
87	Signalmen and signal maintainers.
88	Laborers and groundmen.
89	Assistant signalmen and assistant signal maintainers.
90	Signalmen and signal maintainer helpers.
IV.—Maintenance of equipment and stores.	
91	General foremen (M. E.).
92	Assistant general foremen and department foremen (M. E.).
93	General foremen (shops).
94	Assistant general foremen (shops).
95	Equipment, shop, and electrical inspectors (M. E.).
96	Material and supplies inspectors.
97	Gang foremen and gang leaders (skilled labor).
98	Mechanics.
99	Boilermakers.
100	Carpenters (A).
101	Carpenters (B).
102	Carpenters (C).
103	Carpenters (D).
104	Electrical workers (A).
105	Electrical workers (B).
106	Electrical workers (C).
107	Mechanics.
108	Molders.
109	Sheet-metal workers.
110	Skilled trades helpers (M. E. and Stores).
111	Helper apprentices (M. E. and Stores).
112	Regular apprentices (M. E. and Stores).
113	Gang foremen laborers (shops, enginehouses, power plants, and stores).
114	Cash clerks.
115	Laborers (shops, enginehouses, and power plants).
116	Carpenters (shops, enginehouses, power plants, and stores).
117	Stationary engineers (steam).
118	Stationary foremen and aides (steam and electrical plants).
119	Coal passers and water tenders (steam station boiler rooms).
V.—Transportation (other than train, engine, and yard).	
120	Chief train dispatchers, train dispatchers, and train directors.
121	Station agents (superintendents, master station, telegraphers).
122	Station agents (superintendents, master station, telegraphers).
123	Station agents (superintendents, master station, telegraphers).
124	Station agents (superintendents, master station, telegraphers).
125	Chief telegraphers and telegraphers or wire chiefs.
126	Chief telegraphers and chief telegraphers.
127	Telegraphers, telegraphers, and foremen.
128	Station agents and assistants.
129	Supervising baggage agents.

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List of reporting divisions for employees—Continued.

Division No.	Reporting division.
V.—Transportation (other than train, engine, and yard)—Continued.	
100	Baggage agents and assistants.
101	Baggage, parcel room, and station attendants.
102	General foremen (freight stations, warehouses, grain elevators, and docks).
103	Assistant general foremen (freight stations, warehouses, grain elevators, and docks).
104	Gang foremen (freight station, warehouse, grain elevator, and dock labor).
105	Callers, loaders, scalers, sealers, and perishable freight inspectors.
106	Truckers (stations, warehouses, and platforms).
107	Laborers (coal and ore docks and grain elevators).
108	Common laborers (stations, warehouses, platforms, and grain elevators).
109	Stewards, restaurant and lodging-house managers, and dining-car supervisors.
110	Chefs and first cooks (dining cars and restaurants).
111	Second and third cooks (dining cars and restaurants).
112	Waiters and lodging-house attendants.
113	Camp and crew cooks and kitchen helpers.
114	Barge, lighter, and gasoline launch officers and workers.
115	Dock officers (ferryboats and towing vessels).
116	Engine-room officers (ferryboats and towing vessels).
117	Dock and engine-room workers (ferryboats and towing vessels).
118	Dock and engine-room officers and workers (steamers).
119	Planting equipment shore workers and attendants.
120	Transportation and dining service inspectors.
121	Parlor and sleeping car conductors.
122	Train attendants.
123	Bridge operators and helpers.
124	Crossing and bridge flagmen and gatemen.
125	Foremen (laundry) and laundry workers.
VI (a).—Transportation (yardmasters, switch tenders, and hostlers).	
126	Yardmasters and assistants.
127	Switch tenders.
128	Outside hostlers.
129	Inside hostlers.
130	Outside hostler helpers.
VI (b).—Transportation (train and engine).	
131	Read passenger conductors.
132	Assistant read passenger conductors and ticket collectors.
133	Read freight conductors (through freight).
134	Read freight conductors (local and way freight).
135	Read passenger baggage-men.
136	Read passenger brakemen and flagmen.
137	Read freight brakemen and flagmen (through freight).
138	Read freight brakemen and flagmen (local and way freight).
139	Yard conductors and yard foremen.
140	Yard brakemen and yard helpers.
141	Read passenger engineers and motormen.
142	Read freight engineers and motormen (through freight).
143	Read freight engineers and motormen (local and way freight).
144	Yard engineers and motormen.
145	Read passenger foremen and helpers.
146	Read freight foremen and helpers (through freight).
147	Read freight foremen and helpers (local and way freight).
148	Yard foremen and helpers.



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(C) Passengers.

- (a) On or getting on or off passenger trains.
- (b) On or getting on or off other trains.
- (c) Not on trains.

The class "Passengers" is to cover passengers on trains and all persons lawfully on the premises of the carrier incidentally to traveling on its trains, including passengers temporarily off trains, as at railway restaurants, etc., and at junctions in transferring from one train to another.

(D) Persons carried under contract.

- (a) On or getting on or off passenger trains.
- (b) On or getting on or off other trains.
- (c) Not on trains.

The term "Persons carried under contract" is used herein to mean such persons as postal clerks, express messengers, Pullman conductors and porters, city baggage transfer and omnibus agents, newsboys, peddlers, live-stock tenders and others (not employees of the carrier) in charge of freight, and other like classes of persons authorized by the carrier to be on its trains *primarily for the conduct of their business and not for the purpose of travel*. Such persons when riding as passengers should be classed as passengers.

(E) Other nontravellers.

- (a) On or getting on or off passenger trains.
- (b) On or getting on or off other trains.
- (c) Not on trains.

The class "Other nontravellers" covers persons on public highway crossings, unless classed as trespassers, and persons on the carrier's premises by license, permission, or invitation, who are not classed as employees, passengers, or persons carried under contract, such as persons present to meet trains or to transact business with the carrier, and persons adjacent to railway premises when injured as the result of the operation of the railway. (Students learning the road, etc., in anticipation of employment when sufficiently prepared should, if receiving no compensation, be included in this class.)

(F) Trespassers, employees.

- (a) Walking along track.
- (b) Crossing tracks at public highway crossings.
- (c) Crossing tracks at other places.
- (d) On or getting on or off trains.
- (e) Not otherwise classed.

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TRESPASSERS, OTHER THAN EMPLOYEES:

(G) Trespassers; under 14 years of age.

- (a) Walking along track.
- (b) Crossing tracks at public highway crossings.
- (c) Crossing tracks at other places.
- (d) On or getting on or off trains.
- (e) Not otherwise classed.

(H) Trespassers; 14 to 21 years of age.

- (a) Walking along track.
- (b) Crossing tracks at public highway crossings.
- (c) Crossing tracks at other places.
- (d) On or getting on or off trains.
- (e) Not otherwise classed.

(I) Trespassers; adult hoboes or tramps.

- (a) Walking along track.
- (b) Crossing tracks at public highway crossings.
- (c) Crossing tracks at other places.
- (d) On or getting on or off trains.
- (e) Not otherwise classed.

(J) Trespassers; adults, other persons. (Includes residents of vicinity, visitors, and all other persons trespassing except itinerant unemployed.)

- (a) Walking along track.
- (b) Crossing tracks at public highway crossings.
- (c) Crossing tracks at other places.
- (d) On or getting on or off trains.
- (e) Not otherwise classed.

Whenever persons are classed as "trespassers" the report should state the circumstances that warrant such a classification and, if possible, the regular occupation of such persons killed or injured.

A person should not be classed as a trespasser on a highway grade crossing unless the crossing is protected by gates, or other similar barriers, which were closed when the person went on the crossing, or unless the person attempted to pass over or under trains or cars at the crossing.

**ORDER.**

At a session of the INTERSTATE COMMERCE COMMISSION, Division 4, held at its office in Washington, D. C., on the 21st day of September, 1932.

The matter of accident statistics being under consideration,  
*It is ordered,* That subdivision (C) of section 31 of the Rules Governing Monthly Reports of Railway Accidents, effective January 1, 1922, reading as follows:

(C) Passengers:

- (a) On or getting on or off passenger trains.
- (b) On or getting on or off other trains.
- (c) Not on trains.

The class "Passengers" is to cover passengers on trains and all persons lawfully on the premises of the carrier incidentally to traveling on its trains, including passengers temporarily off trains, as at railway restaurants, etc., and at junctions in transferring from one train to another.

be, and it is hereby, modified to read as follows:

(C-1) Passengers on trains:

- (a) On or getting on or off passenger trains.
- (b) On or getting on or off other trains.

The class "Passengers on trains" is to cover persons holding transportation or paying cash fares who are actually on or getting on or off passenger-carrying trains under conditions not constituting trespass.

(C-2) Travelers not on trains.

The class "Travelers not on trains" is to cover persons who are lawfully on railway premises in connection with their journeys as passengers by railway and not covered by Class (C-1).

The reference to Class (C) in subdivision (B), Employees not on duty, of said section 31 shall be understood as applying to classes (C-1) or (C-2) as may be appropriate according to the nature of the accident.

*It is further ordered,* That the foregoing modification of subdivision (C) of said section 31 shall become effective as of January 1, 1933.

By the Commission, Division 4:

[SEAL]

GEORGE B. MCGINTY,  
Secretary.

**ORDER.**

At a session of the INTERSTATE COMMERCE COMMISSION, Division 4, held at its office in Washington, D. C., on the 17th day of December, A. D. 1932.

The matter of accident statistics being under consideration,  
*It is ordered,* That the list of reporting divisions and the introductory paragraph thereto in section 31 of the Rules Governing Monthly Reports of Railway Accidents, effective January 1, 1922, be, and are hereby, eliminated, and the following substituted therefor:

The following list of 128 Reporting Divisions into which all the distinctive classes of railway positions are grouped is derived from the "Rules Governing the Classification of Steam Railway Employees and Reports of Their Service and Compensation" prescribed by the Interstate Commerce Commission to be effective on July 1, 1921, as amended by order of October 20, 1932. The returns on all accident report forms should, with respect to the classification of employees, be made in conformity with these Reporting Divisions. For each employee reported on Form T as killed or injured there should be given the correct number of the Reporting Division to which the employee is properly assignable, and also the pay-roll or distinctive class title of his occupational position. The letter (A) or (B) should be used to indicate respectively whether he was on or off duty at the time of accident. Abbreviations or contractions may be used in the indication of position titles, if their meaning is sufficiently clear. For example, to indicate a casualty sustained by a road freight brakeman (through freight) on duty, the proper designation of class of person on Form T would be A-117, Road Freight Brakeman and Flagman (through freight), while that of a casualty incurred in a train or a train-service accident by a buffet car porter on duty would be A-101, Train Attendants.

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6a

INTERSTATE COMMERCE COMMISSION.

List of reporting divisions for employees.

Division No.		Reporting division
Old	New	
<i>I.—Executive, clerical, and staff assistants.</i>		
1	1	Executives, general officers, and assistants.
2	2	Division officers, assistants, and staff assistants.
<i>II.—Professional, clerical, and general.</i>		
3, 4, 5, 6	3	Professional and subprofessional assistants.
7	4	Supervisory or chief clerks (major departments).
8	5	Chief clerks (minor departments) and assistant chief clerks and supervising assistants.
9	6	Clerks and clerical specialists (A).
10, 11	7	Clerks (B and C).
12	8	Mechanical device operators (office).
13	9	Stenographers and secretaries (A).
14	10	Stenographers and typists (B).
15	11	Stenographers, sales agents, and buyers.
16	12	Ticket agents and assistant ticket agents.
17	13	Traveling auditors or accountants.
18	14	Telephone switchboard operators and office assistants.
19	15	Messengers and office boys.
20	16	Elevator operators and other office attendants.
21	17	Lieutenants and sergeants of police.
22, 23	18	Patrolmen and watchmen.
24, 25		
26, 27	19	Traffic and various other agents, inspectors and investigators.
28		
29		
30	20	Chain agents or investigators.
31	21	Freight claim agents or investigators.
32	22	Chief claim agents or investigators.
33	23	Miscellaneous trades workers (other than plumbers).
34	24	Motor vehicle and motor car operators.
35	25	Teamsters and stablemen.
36	26	Janitors and cleaners.
<i>III.—Maintenance of way and structures.</i>		
37, 38	27	Roadmasters, general foremen and assistants.
39, 40	28	Maintenance of way and scale inspectors.
41	29	Bridge and building gang foremen (skilled labor).
42	30	Bridge and building carpenters.
43	31	Bridge and building ironworkers.
44	32	Bridge and building painters.
45	33	Masons, bricklayers, plasterers, and plumbers.
46	34	Maintenance of way and structures helpers and apprentices.
47	35	Portable steam equipment operators.
48	36	Portable steam equipment operator helpers.
49	37	Pumping equipment operators.
50	38	Gang foremen (extra-gang and work train laborers).
51	39	Gang foremen (bridge and building, signal and telegraph laborers).
52	40	Extra gang foremen.
53	41	Section men.
54, 55	42	Maintenance of way laborers (other than track and roadway) and gardeners and farmers.
56	43	General and assistant general foremen and inspectors (signal, telegraph, and electrical transmission).
57	44	Gang foremen (signal and telegraph skilled trades labor).

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MONTHLY REPORTS OF RAILWAY ACCIDENTS.

List of reporting divisions for employees—Continued.

Division No.		Reporting division
Old	New	
57	46	Signalmen and signal maintainers.
58	47	Limen and groundmen.
59	48	Assistant signalmen and assistant signal maintainers.
60	49	Signalman and signal maintainers' helpers.
<i>IV.—Maintenance of equipment and stores.</i>		
61, 62	50	General, assistant general, and department foremen.
63, 64	51	General and assistant general foremen (Stores).
65, 66	52	Equipment, shop, electrical, material, and supplies inspectors.
67	53	Gang foremen and gang leaders (skilled labor).
68	54	Blacksmiths.
69	55	Boilermakers.
70, 71	56	Carmen (A and B).
72, 73	57	Carmen (C and D).
74	58	Electrical workers (A).
75	59	Electrical workers (B).
76	60	Electrical workers (C).
77	61	Machinists.
78	62	Molders.
79	63	Sheet-metal workers.
80	64	Skilled trades helpers (M. of E. and Stores).
81	65	Helper apprentices (M. of E. and Stores).
82	66	Regular apprentices (M. of E. and Stores).
83	67	Coach cleaners.
84	68	Gang foremen (shops, engine houses, and power plants).
85	69	Gang foremen (stores and ice, reclamation, and timber-treating plants).
86	70	Classified laborers (shops, engine houses, and power plants).
87	71	General laborers (shops, engine houses, and power plants).
88	72	General laborers (stores and ice, reclamation, and timber-treating plants).
89	73	Stationary engineers (steam).
90, 91	74	Stationary firemen, oilers, coal passers, and water tenders.
<i>V.—Transportation (other than train, engine, and yard).</i>		
92	75	Chief train dispatchers.
93	76	Train dispatchers.
94	77	Train directors.
95	78	Station agents (supervisory, major stations, nontelegraphers).
96	79	Station agents (smaller stations, nontelegraphers).
97	80	Station agents (telegraphers and telephoners).
98	81	Chief telegraphers and telephoners or wire chiefs.
99	82	Clerk-telegraphers and clerk-telephoners.
100	83	Telegraphers, telephoners, and towermen.
101	84	Station masters and assistants.
102	85	Supervising baggage agents.
103	86	Baggage agents and assistants.
104	87	Baggage, parcel, room, and station attendants.
105	88	General foremen (freight stations, warehouses, grain elevators, and docks).
106	89	Assistant general foremen (freight stations, warehouses, grain elevators, and docks).
107	90	Gang foremen (freight station, warehouse, grain elevator, and dock labor).
108	91	Callers, loaders, sealers, scales, and perishable-freight inspectors.
109	92	Truckmen (stations, warehouses, and platforms).



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## INTERSTATE COMMERCE COMMISSION.

List of reporting divisions for employees—Continued.

Division No.		Reporting division
Old	New	
107	93	Laborers (coal and ore docks and grain elevators)
108	94	Common laborers (stations, warehouses, platforms, and grain elevators)
109	95	Stewards, restaurant and lodging-house managers, and dining-car supervisors
110, 111	96	Chefs and cooks (restaurants or dining cars)
112, 113	97	Waiters, camp cooks, kitchen helpers, etc.
114, 115		Officers, workers, and attendants on barges, launches, ferry boats, towing vessels, steamers, and shore workers
116, 117	98	
118, 119		
120	99	Transportation and dining-service inspectors
121	100	Parlor and sleeping car conductors
122	101	Train attendants
123	102	Bridge operators and helpers
124	103	Crossing and bridge flagmen and gatemen
125	104	Ferreters (laundry) and laundry workers
VI (a) — Transportation (yardmasters, switch tenders, and hostlers)		
126	105	Yardmasters
126	106	Assistant yardmasters
127	107	Switch tenders
128	108	Outside hostlers
129	109	Inside hostlers
130	110	Outside hostler helpers
VI (b) — Transportation (train and engine)		
131	111	Road passenger conductors
132	112	Assistant road passenger conductors and ticket collectors
133	113	Road freight conductors (through freight)
134	114	Road freight conductors (local and way freight)
135	115	Road passenger baggagemen
136	116	Road passenger brakemen and flagmen
137	117	Road freight brakemen and flagmen (through freight)
138	118	Road freight brakemen and flagmen (local and way freight)
139	119	Yard conductors and yard foremen
140	120	Yard brakemen and yard helpers
141	121	Road passenger engineers and motormen
142	122	Road freight engineers and motormen (through freight)
143	123	Road freight engineers and motormen (local and way freight)
144	124	Yard engineers and motormen
145	125	Road passenger firemen and helpers
146	126	Road freight firemen and helpers (through freight)
147	127	Road freight firemen and helpers (local and way freight)
148	128	Yard firemen and helpers

It is further ordered, That this order shall become effective on January 1, 1933.

By the Commission, Division 4:

[SEAL]

GEORGE B. MCGINTY,  
Secretary.

## ORDER.

At a Session of the INTERSTATE COMMERCE COMMISSION, Division 4, held at its office in Washington, D. C., on the 14th day of January, 1936.

The matter of accident statistics being under consideration, It is ordered, That the second, third, and fourth paragraphs of section 26 of the Rules Governing Monthly Reports of Railway Accidents, effective January 1, 1922, be, and they are hereby, modified to read as follows:

## DESCRIPTION.

In reporting accidents involving trains, locomotives, or cars, sufficient particulars should be given to show definitely to which of the four classes described below the equipment was assigned. Definite information is required in this respect and descriptive terms of local application, such as "milk," "transfer," "mine," etc., should not be used to designate classes of trains. In connection with this matter, a light engine involved in an accident should be classified as belonging to that class of service to which its assignment at the time of accident was related.

**Transportation service—Freight.**—This class includes trains run between terminals or stations containing loaded or empty freight-train cars and trains consisting of a locomotive and caboose running light in connection with such service. Trains which contain passenger-train cars shall be classed as freight trains whenever the number of freight-train cars is in excess of the number of passenger-train cars in them.

**Transportation service—Passenger.**—This class includes trains run between terminals or stations containing loaded or empty passenger-train cars and trains consisting of deadhead passenger-train cars. Trains which contain freight-train cars shall be classed as passenger trains whenever the number of passenger-train cars is in excess of the number of freight-train cars in them.

It is further ordered, That the fifth and sixth paragraphs of said section 26 relating to mixed and special transportation service be and hereby are canceled.

It is further ordered, That the foregoing modification of section 26 shall become effective as of January 1, 1936.

By the Commission, Division 4:

[SEAL]

GEORGE B. MCGINTY,  
Secretary.

Defendant's Exhibit No. 261 (Witness J.J. Sullivan)  
Feb. 5, 1941

**INTERSTATE COMMERCE COMMISSION RULES  
GOVERNING MONTHLY REPORTS OF RAILWAY ACCIDENTS  
EFFECTIVE ON JANUARY 1, 1922**

**ABSTRACT OF PAGES 22 AND 23**

**FORM AND ARRANGEMENT OF REPORTS.**

15. **Forms Used and Duplicate Reports.**—Monthly reports of railway accidents (including rail failures causing train accidents) should be made on forms provided by the Interstate Commerce Commission or on forms identical therewith in arrangement, size, and in color and weight of paper, and every reporting carrier is required to retain in its files a duplicate of each report rendered to the commission. The forms provided, which are of four kinds, are designated as Forms V, T, R, and F.

Each sheet of each report should show in the appropriate place the name of the company for which it is filed, the month and year to which the report relates, together with all other particulars called for by the form. Each sheet of each report following Form V should bear the autograph signature of a responsible officer or employee.

16. **Form V (Verification).**—A report should be made on this form each month, even though no reportable (train, train-service, or non-train) accident occurred during the month covered. Such report should include an oath or verification, made by the proper officer of the reporting carrier, as provided for attestation on Form V, which should show the number of train and train-service accidents that occurred during the month for which the report is made, and the number of sheets, inclusive of Form V. If no reportable accident occurred during the month, that fact should be stated on this form. Form V should also show the total number of locomotive miles run during the month, computed in accordance with the Interstate Commerce Commission's Classification of Train-miles, Locomotive-miles, and Car-miles. If any reportable nontrain accidents occurred during the month, they should be reported in the tables provided on Form V, but if none occurred, that fact should be stated as required.

17. **Form T (Train and Train-Service Accidents).**—A separate Form T sheet should be used for each reportable train accident or train-service accident and should show the required particulars concerning the accident.

18. **Form R (Rail Failures).**—In case of reportable train accidents resulting from rail failures, particulars of the failures should be reported on Form R; and all the information called for on that form should be furnished additionally to that required on Form T.

19. **Form F (Subsequent Fatalities).**—If, as the result of an injury, a person dies more than 24 hours after the occurrence of the accident, the casualty should be reported on a Form T as an injury, with full details as required by the provisions of the form, and in addition, a memorandum of the death should be given on Form F in accordance with the requirements of that form. This additional report is to be made in connection with the report for the month in which the accident occurred, if practicable, otherwise it should separately accompany the first monthly report filed after the death has come to the knowledge of the carrier. A single Form F may contain reports of more than one such fatality, provided all persons included therein were injured during the same month. A Form F is not required in relation to a nontrain accident.

(1940 Revision)

# MONTHLY REPORT OF RAILWAY ACCIDENTS

## TO THE INTERSTATE COMMERCE COMMISSION

### BUREAU OF STATISTICS

Form **V**Name of report-  
ing carrierReport for the  
month of

194

Total number of miles run during month:

This report  
consists ofsheets,  
numbered

1 to , inclusive.

Locomotive

Motor train

Total

### VERIFICATION

STATE OF

COUNTY OF

ss:

I, \_\_\_\_\_

being first duly sworn, do say upon my oath that I am \_\_\_\_\_

(Title of office held by affiant)

of \_\_\_\_\_, that as such officer of the said carrier it is my duty to have supervision over the record of reportable accidents arising from the operation of the railway of the said carrier, and that I have caused to be compiled from the said record and to be carefully examined the annexed report of such accidents occurring during the month named at the head of this sheet; that the total number of train and train-service accidents (as defined in the effective rules of the

Interstate Commerce Commission) during the said month was \_\_\_\_\_; that the said annexed report includes \_\_\_\_\_ sheets in addition to the present sheet; that each of said additional sheets is marked with the name of the month and the year above shown and the name of the reporting carrier, and is validated with the autograph signature of a responsible officer or employee of the said carrier, and that the said report is true and complete to the best of my knowledge and belief.

Subscribed and sworn to before me, a notary public in and for the State and County

aforesaid, this \_\_\_\_\_ day of \_\_\_\_\_, 194\_\_\_\_\_

(Use an im-  
[L. S.]  
pression seal)

Notary Public

(Signature of affiant)

### INSTRUCTIONS

1. A report should be filed on Form V each month regardless of whether a reportable accident of any kind occurred during the month.
2. The laudatory statements of nontrain accidents (Sections A and B) must include all reportable nontrain accidents as defined in the Commission's Rules Governing Monthly Reports Railway Accidents. If no reportable nontrain accident occurred during the month covered by a report, that fact should be indicated by entering the word "None" opposite "Total persons in nontrain accidents" in Section B.
3. It should be noted that no casualties resulting from train or train-service accidents should be included in Sections A and B, as these sections pertain exclusively to nontrain accidents.
4. Accidents to persons resulting in immediate death or in death within 24 hours from the time the accident occurred should be reported in columns headed "Killed"; all other reportable accidents to persons, including those resulting in death of the persons injured after an interval of more than 24 hours from the time the accident occurred, should be reported in the columns headed "Injured".
5. Casualties to employees should be included in the returns when the period of incapacity exceeds 3 days in the aggregate during the 10 days immediately following the accident, and casualties to other persons should be included when the period of disability exceeds 1 day.
6. In the current "Rules Governing the Classification of Steam Railway Employees", etc., prescribed by the Interstate Commerce Commission, the distinctive classes of railway positions are grouped into 128 so-called Reporting Divisions, named in this form, and returns of casualties to employees should be made in conformity with them.
7. SECTION A.—This section pertains exclusively to casualties to employees on duty caused by reportable nontrain accidents.
8. SECTION B.—This section should include casualties to all classes of persons in reportable nontrain accidents.
9. SECTION C.—This section is intended for the recapitulation of reportable casualties to persons of all classes incurred in railway accidents of all kinds, and so should cover all nontrain casualties includable in Section B of Form V, as well as all train and train-service casualties returnable in Form T. Item No. 7, "Trespassers", is to include all persons regardless of class when trespassing.
10. SECTION D.—This section requires a separate statement of all casualties in train and train-service accidents occurring at public highway grade crossings that are properly included in Section C also.
11. SECTION E.—This section requires a separate statement of all casualties due to failures of locomotives, tenders, and appurtenances that are properly included in Sections A and B also.
12. SECTION F.—This section should be confined to injuries to employees on duty that resulted in incapacity beyond day or shift of accident, but for not more than 3 days in the aggregate within the 10-day period immediately following the accident, and should not include injuries reportable under the 1922 book of rules.

### SECTION A—NONTRAIN CASUALTIES TO EMPLOYEES ON DUTY

Division No.	Reporting Division	Killed	Injured	Division No.	Reporting Division	Killed	Injured
	I—Executives, officials, and staff assistants:				Total brought forward		
1	Executives, general officers, and assistants				II—Professional, clerical, and general—Continued		
2	Division officers, assistants, and staff assistants			14	Telephone switchboard operators and office assistants		
	II—Professional, clerical, and general:			15	Messengers and office boys		
3	Professional and subprofessional assistants			16	Elevator operators and other office attendants		
4	Supervisory or chief clerks (major departments)			17	Lieutenants and sergeants of police		



Motor train

Total

## VERIFICATION

STATE OF

COUNTY OF

ss:

I, \_\_\_\_\_

(Name of affiant)

being first duly sworn, do say upon my oath that I am \_\_\_\_\_

(Title of office held by affiant)

of \_\_\_\_\_, that as such officer of the said carrier it is my duty to have supervision over the record of \_\_\_\_\_ (Name of reporting carrier) of reportable accidents arising from the operation of the railway of the said carrier, and that I have caused to be compiled from the said record and to be carefully examined the annexed report of such accidents occurring during the month named at the head of this sheet; that the total number of train and train-service accidents (as defined in the effective rules of the

Interstate Commerce Commission) during the said month was \_\_\_\_\_ that the said annexed report includes \_\_\_\_\_ sheets in addition to the present sheet; that each of said additional sheets is marked with the name of the month and the year above shown and the name of the reporting carrier, and is validated with the autograph signature of a responsible officer or employee of the said carrier; and that the said report is true and complete to the best of my knowledge and belief.

Subscribed and sworn to before me, a notary public in and for the State and County

abovesaid, this \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_

(Use an im-  
[L. S.]  
pression seal)

Notary Public

(Signature of affiant)

## INSTRUCTIONS

1. A report should be filed on Form V each month regardless of whether a reportable accident of any kind occurred during the month.
2. The tabular statements of nontrain accidents (Sec. A and B) must include all reportable nontrain accidents as defined in the Commission's Rules Governing Monthly Reports Railway Accidents. If no reportable nontrain accident occurred during the month covered by a report, that fact should be indicated by entering the word "None" opposite "Total persons in nontrain accidents" in Section B.
3. It should be noted that no casualties resulting from train or train-service accidents should be included in Sections A and B, as these sections pertain exclusively to nontrain accidents.
4. Accidents to persons resulting in immediate death or in death within 24 hours from the time the accident occurred should be reported in columns headed "Killed"; all other reportable accidents to persons, including those resulting in death of the persons injured after an interval of more than 24 hours from the time the accident occurred, should be reported in the columns headed "Injured".
5. Casualties to employees should be included in the returns when the period of incapacity exceeds 3 days in the aggregate during the 10 days immediately following the accident, and casualties to other persons should be included when the period of disability exceeds 1 day.
6. In the current "Rules Governing the Classification of Steam Railway Employees", etc., prescribed by the Interstate Commerce Commission, the distinctive classes of railway positions are grouped into 128 so-called Reporting Divisions, named in this form, and returns of casualties to employees caused by reportable nontrain accidents.
7. SECTION A.—This section pertains exclusively to casualties to employees on duty caused by reportable nontrain accidents.
8. SECTION B.—This section should include casualties to all classes of persons in reportable nontrain accidents.
9. SECTION C.—This section is intended for the recapitulation of reportable casualties to persons of all classes incurred in railway accidents of all kinds, and so should cover all nontrain casualties includable in Section B of Form V, as well as all train and train-service casualties returnable in Form T. Item No. 7, "Trespassers", is to include all persons regardless of class when trespassing.
10. SECTION D.—This section requires a separate statement of all casualties in train and train-service accidents occurring at public highway grade crossings that are properly included in Section C also.
11. SECTION E.—This section requires a separate statement of all casualties due to failures of locomotives, tenders, and appurtenances that are properly included in Sections A and B also.
12. SECTION F.—This section should be confined to injuries to employees on duty that resulted in incapacity beyond day or shift of accident, but for not more than 3 days in the aggregate within the 10-day period immediately following the accident, and should not include injuries reportable under the 1922 book of rules.

## SECTION A—NONTRAIN CASUALTIES TO EMPLOYEES ON DUTY

Division No.	Reporting Division	Killed	Injured	Division No.	Reporting Division	Killed	Injured
	<b>I—Executives, officials, and staff assistants</b>				<b>Total brought forward</b>		
1	Executives, general officers, and assistants				<b>II—Professional, clerical, and general—Continued</b>		
2	Division officers, assistants, and staff assistants			14	Telephone switchboard operators and office assistants		
	<b>II—Professional, clerical, and general</b>			15	Messengers and office boys		
3	Professional and subprofessional assistants			16	Elevator operators and other office attendants		
4	Supervisory or chief clerks (major departments)			17	Lieutenants and sergeants of police		
5	Chief clerks (minor departments) and assistant chief clerks and supervising cashiers			18	Patrolmen and watchmen		
6	Clerks and clerical specialists (A)			19	Traffic and various other agents, inspectors, and investigators		
7	Clerks (B and C)			20	Claim agents or investigators		
8	Mechanical device operators (office)			21	Freight claim agents or investigators		
9	Stenographers and secretaries (A)			22	Chief claim agents or investigators		
10	Stenographers and typists (B)			23	Miscellaneous trades workers (other than plumbers)		
11	Storekeepers, sales agents, and buyers			24	Motor vehicle and motor car operators		
12	Ticket agents and assistant ticket agents			25	Teamsters and stablemen		
13	Traveling auditors or accountants			26	Janitors and cleaners		
	<b>Total carried forward</b>				<b>Total carried forward</b>		

(OVER)

5768

12-1151

3790

# SECTION A—NORTRAIN CASUALTIES TO EMPLOYEES ON DUTY—Continued

Division No.	Reporting Division	Killed	Injured	Division No.	Reporting Division	Killed	Injured
	Total brought forward.....				Total brought forward.....		
	III—Maintenance of way and structures				IV—Maintenance of equipment and stores—Continued		
27	Roadmasters, general foremen, and assistants.....			65	Helper apprentices (M. of E. and stores).....		
28	Maintenance of way and scale inspectors.....			66	Regular apprentices (M. of E. and stores).....		
29	Bridge and building gang foremen (skilled labor).....			67	Coach cleaners.....		
30	Bridge and building carpenters.....			68	Gang foremen (shops, engine houses, and power plants).....		
31	Bridge and building ironworkers.....			69	Gang foremen (stores and ice, reclamation, and timber-treating plants).....		
32	Bridge and building painters.....			70	Classified laborers (shops, engine houses, and power plants).....		
33	Masons, bricklayers, plasterers, and plumbers.....			71	General laborers (shops, engine houses, and power plants).....		
34	Maintenance of way and structures helpers and apprentices.....			72	General laborers (stores and ice, reclamation, and timber-treating plants).....		
35	Portable steam equipment operators.....			73	Stationary engineers (steam).....		
36	Portable steam equipment operator helpers.....			74	Stationary firemen, oilers, coal passers, and water-tenders.....		
37	Pumping equipment operators.....				V—Transportation (other than train, engine, and yard)		
38	Gang foremen (extra gang and work-train laborers).....			75	Chief train dispatchers.....		
39	Gang foremen (bridge and building, signal and telegraph laborers).....			76	Train dispatchers.....		
40	Gang or section foremen.....			77	Train directors.....		
41	Extra gang men.....			78	Station agents (supervisory, major stations, nontelegraphers).....		
42	Section men.....			79	Station agents (smaller stations, nontelegraphers).....		
43	Maintenance of way laborers (other than track and roadway) and gardeners and farmers.....			80	Station agents (telegraphers and telephoners).....		
44	General and assistant general foremen and inspectors (signal, telegraph, and electrical transmission).....			81	Chief telegraphers and telephoners or wire chiefs.....		
45	Gang foremen (signal and telegraph skilled trades labor).....			82	Clerk-telegraphers and clerk-telephoners.....		
46	Signalmen and signal maintainers.....			83	Telegraphers, telephoners, and towermen.....		
47	Linemen and groundmen.....			84	Station masters and assistants.....		
48	Assistant signalmen and assistant signal maintainers.....			85	Supervising baggage agents.....		
49	Signalman and signal maintainer helpers.....			86	Baggage agents and assistants.....		
	IV—Maintenance of equipment and stores			87	Baggage, parcel room, and station attendants.....		
50	General, assistant general, and department foremen.....			88	General foremen (freight stations, warehouses, grain elevators, and docks).....		
51	General and assistant general foremen (stores).....			89	Assistant general foremen (freight stations, warehouses, grain elevators, and docks).....		
52	Equipment, shop, electrical, material, and supplies inspectors.....			90	Gang foremen (freight station, warehouse, grain elevator, and dock labor).....		
53	Gang foremen and gang leaders (skilled labor).....			91	Callers, loaders, scalers, sealers, and perishable-freight inspectors.....		
54	Blacksmiths.....			92	Truckers (stations, warehouses, and platforms).....		
55	Refrigerators.....			93	Laborers (coal and ore docks and grain elevators).....		
56	Carmen (A and B).....			94	Common laborers (stations, warehouse, platforms, and grain elevators).....		
57	Carmen (C and D).....			95	Stewards, restaurant and lodging-house managers, and dining-car supervisors.....		
58	Electrical workers (A).....			96	Chefs and cooks (restaurants or dining cars).....		
59	Electrical workers (B).....			97	Waiters, camp cooks, kitchen helpers, etc.....		
60	Electrical workers (C).....			98	Officers, workers, and attendants on barges, launches, ferry boats, towing vessels, steamers, and shore workers.....		
61	Mechanists.....			99	Transportation and dining-service inspectors.....		
62	Molders.....			100	Parlor and sleeping car conductors.....		
63	Sheet-metal workers.....				Total carried forward.....		
64	Skilled trades helpers (M. of E. and stores).....						
	Total carried forward.....						

# SECTION A—NONTRAIN CASUALTIES TO EMPLOYEES ON DUTY—Continued

Division No.	Reporting Division	Killed	Injured	Division No.	Reporting Division	Killed	Injured
	Total brought forward.....				Total brought forward.....		
	V—Transportation (other than train, engine, and yard)—Contd.				VI (b)—Transportation (train and engine)—Continued		
101	Train attendants.....			114	Road freight conductors (local and way freight).....		
102	Bridge operators and helpers.....			115	Road passenger baggagemen.....		
103	Crossing and bridge flagmen and gatemen.....			116	Road passenger brakemen and flagmen.....		
104	Foremen (laundry) and laundry workers.....			117	Road freight brakemen and flagmen (through freight).....		
	VI (a)—Transportation (yard masters, switchtenders, and hostlers)			118	Road freight brakemen and flagmen (local and way freight).....		
105	Yardmasters.....			119	Yard conductors and yard foremen.....		
106	Assistant yardmasters.....			120	Yard brakemen and yard helpers.....		
107	Switch tenders.....			121	Road passenger engineers and motormen.....		
108	Outside hostlers.....			122	Road freight engineers and motormen (through freight).....		
109	Inside hostlers.....			123	Road freight engineers and motormen (local and way freight).....		
110	Outside hostler helpers.....			124	Yard engineers and motormen.....		
	VI (b)—Transportation (train and engine)			125	Road passenger firemen and helpers.....		
111	Road passenger conductors.....			126	Road freight firemen and helpers (through freight).....		
112	Assistant road passenger conductors and ticket collectors.....			127	Road freight firemen and helpers (local and way freight).....		
113	Road freight conductors (through freight).....			128	Yard firemen and helpers.....		
	Total carried forward.....				TOTAL EMPLOYEES ON DUTY IN NONTRAIN ACCIDENTS.....		

## SECTION B—DISTRIBUTION OF NONTRAIN CASUALTIES ACCORDING TO CLASSES OF ACCIDENT

Class of accident	Employees on duty		Class of accident	Employees on duty	
	Killed	Injured		Killed	Injured
(a) Shop machinery, stationary engines and motors, cranes, etc.....(1)			Total brought forward.....		
(b) Locomotive cranes, steam shovels, dredges, pile drivers, etc.....(2)			(j) M. W. and S. hand cars (nontrain accidents only).....(10)		
(c) Transmission apparatus (belts, gears, shafting, ropes, etc.).....(3)			(k) M. W. and S. motor cars (nontrain accidents only).....(11)		
(d) Use of hand tools, apparatus, etc.....(4)			(l) Handling freight or supplies.....(12)		
(e) Flying particles.....(5)			(m) Falls of employees not includable in classes (a) to (j).....(13)		
(f) Explosives and inflammable, hot, or corrosive substances.....(6)			(n) Miscellaneous nontrain accidents.....(14)		
(g) Electric currents.....(7)			TOTAL EMPLOYEES ON DUTY IN NONTRAIN ACCIDENTS.....		
(h) Collapse, fall, etc., of objects.....(8)					
(i) Handling rails, ties, bridge timbers, etc.....(9)			(o) Other persons in nontrain accidents.....(15)		
Total carried forward.....			TOTAL PERSONS IN NONTRAIN ACCIDENTS.....		

## SECTION C—RECAPITULATION OF ALL CASUALTIES TO PERSONS RESULTING FROM REPORTABLE TRAIN, TRAIN-SERVICE, AND NONTRAIN ACCIDENTS

No.	Class of person	Train accidents		Train-service accidents		Nontrain accidents		Total accidents (train, train-service, and nontrain)	
		Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
1	Employees on duty.....								
2	Employees not on duty.....								
3	Passengers on trains.....								
4	Travelers not on trains.....								
5	Persons carried under contract.....								
6	Other nontravellers.....								
7	Trespassers (all classes).....								
8	GRAND TOTAL.....								



### SECTION D—HIGHWAY GRADE-CROSSING ACCIDENTS\*

No.	Class of person	Train accidents		Train-service accidents		Total	
		Killed	Injured	Killed	Injured	Killed	Injured
1	Employees on duty.....						
2	Employees not on duty.....						
3	Passengers on trains.....						
4	Travelers not on trains.....						
5	Persons carried under contract.....						
6	Other nonresponders.....						
7	Trespassers (all classes).....						
8	TOTAL.....						

\*See Item No. 10 of Instructions on face of this form.

### SECTION E—FAILURES OF LOCOMOTIVES, TENDERS, AND APPURTENANCES IN NONTRAIN ACCIDENTS\*

Number of accidents.....

No.	Class of person	Killed	Injured
1	Employees on duty.....		
2	Employees not on duty.....		
3	Other persons.....		
4	TOTAL.....		

\*See Item No. 11 of Instructions on face of this form.

### SECTION F—INCAPACITY BEYOND DAY OR SHIFT, NOT IN EXCESS OF 3 DAYS\*

No.	Kind of accident	Number of injuries to employees on duty
1	Train.....	
2	Train service.....	
3	Nontrain.....	
4	TOTAL.....	

## T

TO THE BUREAU OF STATISTICS

INTERSTATE COMMERCE COMMISSION

SHEET No. ....

If "joint operation," or crossing collision, name roads involved (2)	If "joint operation," name road whose superintendent is in charge of track (3)
--	--

Carrier's } Carrier's di } Date of } Time of } I. C. C. }  
number (4) } vision (5) } accident (6) } day (7) } class (8) }

Place of accident (7)	Name of State (9)	Nearest station (10)	Nearest milepost (11)	Estimated distance and direc- tion from station named (12)

Kind of accident (13) } Clear, cloudy, } Raining or } Daylight }  
or foggy? (14) } snowing? (15) } or dark? (16) }

Cause (briefly) (17).....

Kind of train (18)	Train No. (18a)	Number of cars in train (18b)	Engine Nos. (19)	Direction (20)	Speed (21)	m. p. h.
-----------------------	--------------------	----------------------------------	---------------------	-------------------	---------------	----------

(22) Method of operation ..... (23) Number of main tracks .....

(Answers to questions 22 and 23 required only in connection with collisions)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
																																						I. C. C. use only							

## (24) DETAILS OF CASUALTIES TO PERSONS

[illegible]

	NAME OF ROAD:	(a) Equipment	(b) Way and Structures	(c) Clearing Wreck	(d) Total
(25) COST		\$	\$	\$	\$





## INSTRUCTIONS REGARDING ENTRIES ON FACE OF THIS SHEET

(References are to sections of the Commission's Rules governing Monthly Reports of Railway Accidents, 1922 Revision)

1. The significant words in the name of the reporting carrier should be given in full, so far as practicable.
2. and 3. Concerning train accidents occurring on terminal or other track operated jointly or in common, or classifiable as crossing collisions, see, respectively, sections 5, 5a, and 5b, and 8 (e) and (f) of Rules.
4. Enter the number of the accident as recorded in the carrier's operating records.
5. Enter the name of the operating division on which the accident occurred.
6. State the day of the month.
7. State the time o'clock in hours and minutes, a.m. or p.m.
8. Enter a capital letter to indicate the class (see section 20 of the Rules) and a small letter to indicate the subclass (see sections 8 to 13).
9. The customary abbreviation for the name of a State may be used.
10. Give the name of the station nearest to the place where the accident occurred (or was first discovered) and indicate whether it occurred on main track, or on yard track or sidings. This information should be given both for train accidents and train-service accidents. Main tracks within yards are not to be regarded as yard tracks. Sidings not used exclusively as passing tracks are to be regarded as yards. See section 25 of Rules.
11. The giving of the number of the milepost nearest to the place of the accident is optional; and instead of giving it in the case of either a train or a train-service accident, if the accident occurred at a station, that fact should be stated, or, if it occurred within a yard, the name or description of the yard should be given.
12. Distance, estimated in miles or rods, should be given when appropriate.
13. Show the kind of train, as freight, passenger, work, switching, etc. If light engine, state to what class of service assigned. See section 26 of Rules.
14. Give the time-table direction.
15. Give the estimated speed in miles per hour.
16. In case of a collision, show whether trains were operated under a block system at point of accident, stating specifically what method of blocking, if any, was employed.
17. Give number of main tracks in use in locality of accident.
18. (b) See section 31 of Rules.
19. (c) See section 30 of Rules.
20. State the amount of damage to equipment (including damage to foreign cars), to other railway property, and cost of clearing wreck, with the total amount as provided. In case of a "joint-operation" accident, figures for the several items should be given for each road involved, the name of which should be clearly indicated. If no other road is involved, respondent may make the requisite entries on "Total" line only. See section 29 of Rules.
21. For information in general pertinent to the matter of returns, see sections 1 to 13, 17, 20, and 22 to 31 of Rules. If the space afforded on Form T is insufficient for all the requisite entries concerning a particular accident, blank sheets of like size, suitably identified and completed, may be attached to a single Form T containing the introductory details applicable to the accident as a whole.

1939  
RevisionINTERSTATE COMMERCE COMMISSION  
Bureau of StatisticsSupplement to  
T sheet No. \_\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_  
(Month)

## MONTHLY REPORT OF ACCIDENTS AT PUBLIC HIGHWAY GRADE CROSSINGS

Name of carrier \_\_\_\_\_

Date of accident \_\_\_\_\_ . Nearest station \_\_\_\_\_

A report on this form must accompany each Form T sheet carrying the symbols D-f, M-a, or S-h, in item (8). (Refer to section 9 (f), page 17; section 12 (a), page 19; section 13 (h), page 21; and section 20, page 23 of Rules Governing Monthly Reports of Railway accidents - 1922 Revision.)

## 1. Type of accident:

(a) Person, vehicle, or object involved \_\_\_\_\_

(b) Type of vehicle \_\_\_\_\_

(b1) Struck by train \_\_\_\_\_; (b2) Ran into side of train \_\_\_\_\_

2. Part of train struck (if ran into side of train) \_\_\_\_\_

## 3. Crossing protection at time of accident:

(a) Type of protection \_\_\_\_\_

(b) Operation - Automatic \_\_\_\_\_; Manual \_\_\_\_\_; Other \_\_\_\_\_

(c) Located on - Both sides of crossing \_\_\_\_\_; Side from which vehicle approached \_\_\_\_\_; Side opposite \_\_\_\_\_

(d) State any factor impairing effective operation \_\_\_\_\_

4. State whether view of crossing was obscured by buildings, trees, cars, or other objects \_\_\_\_\_

5. Night accidents (one-half hour after sunset to one-half hour before sunrise.)

Crossing illuminated - (Yes or No) \_\_\_\_\_

6. Estimated speed of vehicle's approach \_\_\_\_\_ State also if

(a) Stalled on crossing \_\_\_\_\_; (b) Stopped on crossing \_\_\_\_\_

7. If vehicle subject to Motor Carrier Act, 1935, state name and address of the operating company (or ICC plate number if obtained) \_\_\_\_\_

## MONTHLY REPORT OF RAILWAY ACCIDENTS.

Sheet No. ....

R

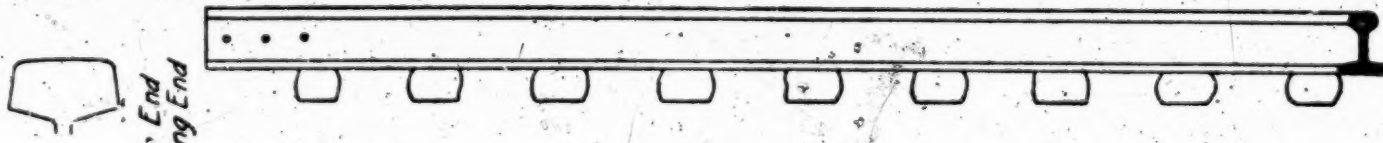
Name of report-  
carrier. }Report to the Interstate Commerce  
Commission for the month of }

193

Date of accident ..... as reported on Form T, Sheet No. ....

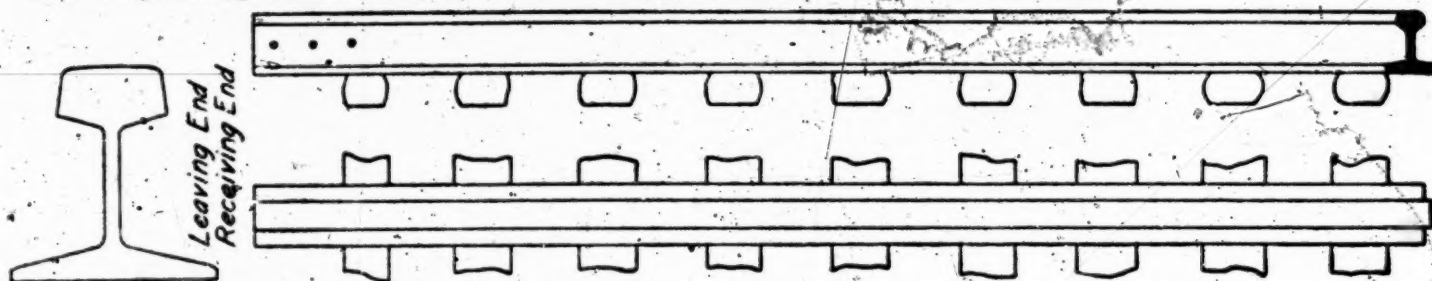
Report of rail failure on the ..... Division. Section No. .... Nearest Station .....

1. Weight per yard—new ..... pounds; rerolled ..... pounds.
2. Rail section.....
3. Brand on rail.....
4. Heat No. on rail.....
5. Rail No. or letter.....
6. Original length of rail.....
7. Month and year rail was laid.....
8. Location..... feet ..... of mile-post.....
9. Which track? ..... Which rail?.....
10. On curve or straight line?.....
11. Degree of curve.....
12. High or low rail, if on curve.....
13. Superelevation of curve at break.....
- 14a. Was rail broken?.....
- 14b. Was rail damaged?.....
- 14c. Was rail defective?.....
15. Was rail much or little worn?.....
16. By whom discovered?.....
17. Date and time found.....
18. Was rail removed?.....
19. If removed, give date.....
20. Exact gage of track at break.....
21. Was break over or between ties?.....
22. Was break square or angular?.....
23. Distance between edges of ties at break.....
24. Condition of ties each side of break.....
25. Kind of ties.....
26. Were tie plates used?..... Kind?.....
27. Condition of line and surface.....
28. Kind of ballast.....
29. Was track properly ballasted?.....
30. Kind of material in roadbed under ballast.....
31. Was track well drained?.....
32. Was roadbed frozen?.....
33. Condition of weather (wet, dry, warm or cold, freezing or thawing).....
- 34a. If break was at joint, state kind, number of holes, and whether it was full-bolted or insulated.....
- 34b. Were any bolts at joint loose?..... If so, how many?.....
35. broken, state cause of break and describe any flaws found at point of break.....
36. If previously damaged, describe nature and cause of damage, if known.....
37. If defective, describe location of flaws or defects, and, if possible, what caused them.....
38. Draw on diagram lines of break, or partial fracture, such as long pieces from side of head and half-moon pieces from base, showing dimensions. Hollows in head should be shown on end section. Defects may also be indicated on diagram. Mark distance from end to break. (\*If break is nearest receiving end, draw pen through words "Leaving end;" if nearest leaving end, draw pen through words "Receiving end."\*)





1. Weight per yard—new ..... pounds; rerolled ..... pounds.
2. Rail section .....
3. Brand on rail .....
4. Heat No. on rail .....
5. Rail No. or letter .....
6. Original length of rail .....
7. Month and year rail was laid .....
8. Location ..... feet ..... of mile-post .....
9. Which track? ..... Which rail? .....
10. On curve or straight line? .....
11. Degree of curve .....
12. High or low rail, if on curve .....
13. Superelevation of curve at break .....
- 14a. Was rail broken? .....
- 14b. Was rail damaged? .....
- 14c. Was rail defective? .....
15. Was rail much or little worn? .....
33. Condition of weather (wet, dry, warm or cold, freezing or thawing) .....
- 34a. If break was at joint, state kind, number of holes, and whether it was full-bolted or insulated .....
- 34b. Were any bolts at joint loose? ..... If so, how many? .....
35. broken, state cause of break and describe any flaws found at point of break .....
36. If previously damaged, describe nature and cause of damage, if known .....
37. If defective, describe location of flaws or defects, and, if possible, what caused them .....
38. Draw on diagram lines of break, or partial fracture, such as long pieces from side of head and half-moon pieces from base, showing dimensions. Hollows in head should be shown on end section. Defects may also be indicated on diagram. Mark distance from end to break. (\*If break is nearest receiving end, draw pen through words "Leaving end;" if nearest leaving end, draw pen through words "Receiving end;" )



39. State any other important circumstances pertaining to failure .....

(Signature) .....

(Title) .....

## INSTRUCTIONS.

In the description on Form R of failures of rails resulting in accidents, reported on Form T in accordance with the Commission's rules governing Monthly Reports of Railway Accidents (see sections 17, 18, and 28), the following terms should be used:

1. *Broken rail*.—This term is to be confined to a rail which is either broken through, separating it into two or more parts, or contains a crack which might result in a complete break. Mention transverse fissures specifically when they occur.

2. *Flow of metal*.—This term means a "rolling out" of the metal on top of the head toward its sides without there being any indication of a breaking down of the head structure; that is, the underside of the head is not distorted.

3. *Crushed head*.—This term is used to indicate a "flattening" of the head, and is usually accompanied by a crushing down of the head.

4. *Split head*.—This term includes rails split through or near the center line of the head or rails with pieces split off the side of the head. When this term is used it should be further defined by stating whether it is or is not accompanied by a seam or hollow head. State also the length of the split or seam.

5. *Split web*.—This term is a longitudinal split along the axis of the web generally starting from the end of the rail through the bolt holes. State whether fracture passed across a bolt hole or in other parts of the web.

6. *Broken base*.—This term covers all breaks in base of rail and should be described and illustrated on the sketches provided for. Mention seams lengthwise the rail when they occur.

7. *Miscellaneous causes*.—This term is intended to cover all failures of rails reportable on Form R not includable in the preceding classes.

U. S. GOVERNMENT PRINTING OFFICE: 1906 12-1000

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MONTHLY REPORT OF RAILWAY ACCIDENTS—SUBSEQUENT FATALITIES. Sheet No. **F**

Name of reporting carrier. }

Report to the Interstate Commerce  
Commission for the month of }

19\_\_

## MEMORANDUM OF FATALITIES DEVELOPED FROM PREVIOUSLY REPORTED INJURIES.

If as the result of an injury, reported on Form T, a person dies more than twenty-four hours after the occurrence of the accident in which it was received, a memorandum containing significant particulars of the death should be given on Form F, which should be rendered in connection with the report for the month in which the accident occurred, if practicable; otherwise it should separately accompany the first monthly report filed after the death has come to the knowledge of the carrier. A single Form F may contain reports of more than one such fatality, provided all persons included therein were injured during the same month. No statements are expected in similar cases due to nontrain accidents. (See Section 19 of the Commission's Rules governing Monthly Reports of Railway Accidents, 1918 Revision.)

Line No.	Name and address of person (a).	Place of death (b).	Date of death (c).	Particulars of accident from which death resulted.		
				Class (d). <sup>1</sup>	Date (e).	Place (f).
1						
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5777

Signature of officer or employee authenticating report

Title

Denote collision by C, derailment by D, locomotive boiler accident by B, other locomotive accident by L, miscellaneous train accident by M, and train-service accident by S; also give number of sheet of original report of accident.

ATTENTION FREIGHT OFFICE

12-1090

3299

**Defendant's Exhibit No. 262 (Witness J.J. Sullivan)**  
**Feb. 5, 1941**

**CASUALTIES TO ALL CLASSES OF EMPLOYEES ON DUTY  
SUSTAINED IN TRAIN AND TRAIN-SERVICE ACCIDENTS  
CLASS I RAILROADS OF THE UNITED STATES  
REFLECTED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION**

**YEARS 1923 TO 1939, INCLUSIVE**

	Year (a)	Total Car Miles (Thousands) (b)	Total Train Miles (Thousands) (c)	Total Locomotive Miles (Thousands) (d)	Man-Hours Worked by All Employees (Thousands) (e)	Casualties to All Classes of Employees on Duty in Train and Train-Service Accidents			Casualty Rate Per			
						Killed (f)	Injured (g)	Total (h)	100 Million Car Miles (i)	Million Train Miles (j)	Million Locomotive Miles (k)	Million Man- Hours (l)
(1)	1923	29 432 900	1 245 099	1 756 170	4 856 983	1 507	38 520	40 027	136.00	32.85	22.79	8.24
(2)	1924	28 889 085	1 204 302	1 672 584	4 472 049	1 131	31 302	32 433	112.27	26.93	19.39	7.25
(3)	1925	30 785 543	1 220 846	1 697 798	4 458 702	1 180	31 275	32 455	105.42	26.58	19.12	7.28
(4)	1926	32 686 043	1 248 897	1 778 071	4 567 483	1 249	32 907	34 156	104.56	27.35	19.21	7.48
(5)	1927	32 462 178	1 220 987	1 728 040	4 416 147	1 121	27 085	28 206	86.89	23.10	16.32	6.39
(6)	1928	34 994 940	1 202 678	1 698 744	4 200 547	916	22 854	23 770	72.04	19.76	13.99	5.66
(7)	TOTAL 1923-28	187 230 289	7 342 809	10 331 407	26 971 909	7 104	183 943	191 047	AVERAGE 102.04	AVERAGE 26.02	AVERAGE 18.49	AVERAGE 7.08
(8)	1929	33 828 943	1 214 360	1 731 883	4 234 806	1 037	21 228	22 265	65.82	18.33	12.86	5.26
(9)	1930	30 177 596	1 106 386	1 550 246	3 648 890	690	13 033	13 723	45.47	12.40	8.85	3.76
(10)	1931	25 608 792	965 181	1 327 467	2 937 370	472	9 077	9 549	37.29	9.89	7.19	3.25
(11)	1932	20 350 867	821 158	1 104 953	2 291 540	414	6 943	7 357	36.15	8.96	6.66	3.21
(12)	1933	20 997 254	786 720	1 080 016	2 117 011	371	5 970	6 341	30.79	8.06	5.87	3.00
(13)	1934	22 179 787	818 473	1 124 043	2 267 515	372	6 252	6 624	29.87	8.09	5.89	2.92
(14)	TOTAL 1929-34	152 743 239	5 712 278	7 918 608	17 497 132	3 356	62 503	65 859	AVERAGE 43.12	AVERAGE 11.53	AVERAGE 8.32	AVERAGE 3.76
(15)	1935	22 312 343	829 198	1 149 494	2 265 664	413	6 195	6 608	29.35	7.97	5.75	2.92
(16)	1936	25 588 229	905 749	1 285 048	2 531 264	519	8 246	8 765	34.25	9.68	6.82	3.46
(17)	1937	26 848 096	933 219	1 310 645	2 646 909	582	8 433	9 015	33.58	9.66	6.88	3.41
(18)	1938	23 141 532	825 682	1 132 482	2 192 822	339	5 906	6 245	26.99	7.56	5.51	2.85
(19)	1939	25 258 741	853 179	1 190 362	2 342 133	353	6 360	6 713	26.58	7.87	5.64	2.87
(20)	TOTAL 1935-39	123 348 941	4 347 027	6 068 032	11 979 312	2 206	35 140	37 346	AVERAGE 30.28	AVERAGE 8.94	AVERAGE 6.15	AVERAGE 3.12
(21)	GRAND TOTAL 1923-39	453 322 469	17 402 114	24 318 047	56 448 353	12 646	281 586	294 232	AVERAGE 63.51	AVERAGE 16.91	AVERAGE 12.10	AVERAGE 5.21
COMPARISONS OF AVERAGE CASUALTY RATES												
(22)	PERIOD 1929 - 34 COMPARED WITH PERIOD 1923 - 28 - DECREASE								57.74%	55.69%	55.00%	46.89%
(23)	PERIOD 1935 - 39 COMPARED WITH PERIOD 1929 - 34 - DECREASE								29.78%	25.50%	26.08%	17.02%
(24)	PERIOD 1935 - 39 COMPARED WITH PERIOD 1923 - 28 - DECREASE								70.33%	66.99%	66.74%	55.93%

SOURCE: Column (b) - I.C.C. Statistics of Railways in the United States, Statement 31 in issue of 1928 for years 1923 to 1928 inclusive; table No. 55 issue of 1938 for years 1929 to 1938, inclusive. Preliminary Abstract of Railway Statistics for Year 1939.

Column (c) - I.C.C. Statistics of Railways in the United States, Statement No. 30 issue of 1928 for years 1923 to 1928 inclusive; table No. 53 issue of 1938 for years 1929 to 1938 inclusive. Preliminary Abstract of Railway Statistics for Year 1939.

Column (d) - I.C.C. Annual Accident Bulletins, Table No. 101 for years 1923 and 1924; Table No. 97 for subsequent years.

Column (e) - (f) - (g) - I.C.C. Annual Accident Bulletins, Table No. 55.

**Defendant's Exhibit No. 263 (Witness J.J. Sullivan)**  
**Feb. 5, 1941**

**CASUALTIES TO ROAD TRAINMEN AND ENGINEERS ON DUTY  
 ALL CLASSES OF SERVICE  
 SUSTAINED IN TRAIN AND TRAIN-SERVICE ACCIDENTS  
 CLASS I RAILROADS OF THE UNITED STATES  
 REFLECTED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION  
 YEARS 1923 TO 1939, INCLUSIVE**

	YEAR (a)	TOTAL CAR MILES (Thousands) (b)	TOTAL TRAIN MILES (Thousands) (c)	MAN-HOURS WORKED BY ROAD TRAINMEN (Thousands) (d)	CASUALTIES TO ROAD TRAIN- MEN ON DUTY IN TRAIN AND TRAIN-SERVICE ACCIDENTS			CASUALTY RATE PER		
					KILLED (e)	INJURED (f)	TOTAL (g)	100 MILLION CAR MILES (h)	MILLION TRAIN MILES (i)	MILLION MAN- HOURS (j)
(1)	1923	29 432 500	1 245 099	499 275	345	21 093	21 638	79.52	17.38	43.34
(2)	1924	28 889 085	1 204 302	534 229	376	16 781	17 157	99.39	14.25	32.12
(3)	1925	30 785 543	1 220 846	529 615	388	16 262	16 650	54.08	13.64	31.44
(4)	1926	32 686 043	1 248 897	540 739	403	16 918	17 321	53.02	13.87	32.03
(5)	1927	32 462 178	1 220 987	510 068	488	14 062	14 434	44.46	11.82	28.30
(6)	1928	32 994 940	1 202 678	481 525	275	11 999	12 234	37.08	10.17	25.21
(7)	Total 1923-28	187 230 289	7 342 809	3 095 451	2 399	97 075	99 434	Average 53.11	Average 13.54	Average 32.12
(8)	1929	33 828 943	1 214 360	482 244	325	10 838	11 163	33.00	9.19	23.15
(9)	1930	30 177 596	1 106 386	409 413	251	7 037	7 288	24.15	6.99	17.80
(10)	1931	25 608 792	965 181	332 460	187	5 113	5 300	20.70	5.49	15.94
(11)	1932	20 350 867	821 158	264 228	163	3 990	4 153	30.41	5.06	15.60
(12)	1933	20 997 254	796 720	256 904	155	3 435	3 990	17.43	4.56	13.97
(13)	1934	22 179 787	818 473	268 510	185	3 696	3 881	17.90	4.74	14.45
(14)	Total 1929-34	152 743 239	5 712 278	2 015 794	1 266	34 109	35 375	Average 23.16	Average 6.19	Average 17.55
(15)	1935	22 512 347	829 198	269 939	166	3 552	3 718	16.52	4.48	13.77
(16)	1936	25 588 229	905 749	306 789	212	4 637	4 849	18.95	5.35	15.81
(17)	1937	26 848 096	933 219	312 500	231	4 482	4 713	17.55	5.05	15.08
(18)	1938	23 141 532	825 682	261 282	164	3 207	3 371	14.57	4.08	12.90
(19)	1939	25 258 741	853 179	273 602	153	3 368	3 521	13.94	4.13	12.87
(20)	Total 1935-39	123 348 941	4 347 027	1 424 112	926	19 246	20 172	Average 16.35	Average 4.64	Average 14.16
(21)	Grand Total 1923-39	463 322 469	17 402 114	6 535 322	4 551	190 430	154 981	Average 33.45	Average 8.91	Average 23.71
COMPARISONS OF AVERAGE CASUALTY RATES										
(22)	PERIOD 1929 - 1934 COMPARED WITH PERIOD 1923 - 1928,				DECREASE			56.39%	54.28%	45.36%
(23)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1929 - 1934,				DECREASE			29.40%	25.04%	19.32%
(24)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1923 - 1928,				DECREASE			69.21%	65.73%	55.92%

NOTE: Road Trainmen and Engineers, includes conductors, brakemen, flagmen, baggagemen, engineers and firemen.

SOURCE: Column (b), I.C.C. Statistics of Railways in the United States, Statement No. 31 issue of 1928 for years 1923 to 1928, inclusive; table No. 55 issue of 1938 for years 1929 to 1938, inclusive. Preliminary Abstract of



	YEAR (a)	TOTAL CAR MILES (Thousands) (b)	TOTAL TRAIN MILES (Thousands) (c)	BY ROAD TRAFFIC (Thousands) (d)	MEN ON DUTY IN TRAIN AND TRAIN SERVICE ACCIDENTS			MILLION CAR MILES (h)	MILLION TRAIN MILES (i)	MILLION MAN- HOURS (j)
					KILLED (e)	INJURED (f)	TOTAL (g)			
(1)	1922	29 432 300	1 245 099	499 275	545	21 093	21 638	73.52	17.38	43.34
(2)	1924	28 889 085	1 204 302	534 229	376	16 781	17 157	99.39	14.25	32.12
(3)	1925	30 785 543	1 220 846	529 615	388	16 262	16 650	54.08	13.64	31.44
(4)	1926	32 666 043	1 248 897	540 739	403	16 918	17 321	53.02	13.87	32.03
(5)	1927	32 462 178	1 220 987	510 068	372	14 062	14 434	44.6	11.82	28.30
(6)	1928	32 994 940	1 202 678	481 525	275	11 999	12 274	37.08	10.17	25.41
(7)	Total 1923-28	187 230 289	7 342 809	3 095 451	2 399	97 075	99 474	Average 53.11	Average 13.54	Average 32.12
(8)	1929	33 828 943	1 214 360	482 244	325	10 838	11 163	33.00	9.19	23.15
(9)	1930	30 177 996	1 106 386	409 413	251	7 037	7 288	24.15	6.99	17.80
(10)	1931	25 608 792	965 181	332 460	287	5 113	5 300	20.70	5.49	15.94
(11)	1932	20 350 869	821 158	266 228	163	3 990	4 153	20.41	5.06	15.60
(12)	1933	20 997 254	786 720	256 904	155	3 435	3 590	17.43	4.56	13.97
(13)	1934	22 179 787	818 473	268 510	185	3 696	3 881	17.90	4.74	14.45
(14)	Total 1929-34	152 743 239	5 712 278	2 015 799	1 266	34 109	35 375	Average 23.16	Average 6.19	Average 17.55
(15)	1935	22 512 343	829 198	269 939	166	3 552	3 718	16.5	4.48	13.77
(16)	1936	25 588 229	905 749	306 789	212	4 637	4 849	18.9	5.35	15.81
(17)	1937	26 848 096	933 219	312 500	231	4 482	4 713	17.55	5.05	15.08
(18)	1938	23 141 532	825 682	261 282	164	3 207	3 371	14.97	4.08	12.90
(19)	1939	25 258 741	853 179	273 602	153	3 368	3 521	13.94	4.13	12.87
(20)	Total 1935-39	123 348 941	4 347 027	1 424 112	926	19 246	20 172	Average 16.35	Average 4.64	Average 14.16
(21)	Grand Total 1923-39	463 322 469	17 402 114	6 535 322	4 551	150 430	154 981	Average 33.45	Average 8.91	Average 23.71
COMPARISONS OF AVERAGE CASUALTY RATES										
(22)	PERIOD 1929 - 1934 COMPARED WITH PERIOD 1923 - 1928,				DECREASE			56.39%	54.28%	45.36%
(23)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1929 - 1934,				DECREASE			29.40%	25.04%	19.32%
(24)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1923 - 1928,				DECREASE			69.21%	65.73%	55.92%

NOTE: Road Trafficmen and Engineers, includes conductors, brakemen, flagmen, baggagemen, engineers and firemen.

SOURCE: Column (b), I.C.C. Statistics of Railways in the United States, Statement No. 31 issue of 1928 for years 1923 to 1928, inclusive; table No. 55 issue of 1938 for years 1929 to 1938, inclusive. Preliminary Abstract of Railway Statistics for year 1939.

Column (c), I.C.C. Statistics of Railways in the United States, statement No. 30 issue of 1928 for years 1923 to 1928; table No. 53 issue of 1938 for years 1929 to 1938, inclusive. Preliminary Abstract of Railway Statistics for year 1939.

Columns (d), (e) and (f), I.C.C. Annual Accident Bulletin, Table No. 55.

Defendant's Exhibit No. 264 (Witness J. J. Sullivan)  
Feb. 5, 1941

CASUALTIES TO ROAD-FREIGHT TRAINMEN AND ENGINEERS ON DUTY

SUSTAINED IN TRAIN AND TRAIN-SERVICE ACCIDENTS  
CLASS I RAILROADS OF THE UNITED STATES  
REFLECTED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION  
YEARS 1923 TO 1939, INCLUSIVE

	YEAR	TOTAL FREIGHT TRAIN AND WORK TRAIN CAR MILES (Thousands)	TOTAL FREIGHT TRAIN AND WORK TRAIN TRAIN MILES (Thousands)	MAN-HOURS WORKED BY ROAD-FREIGHT TRAINMEN AND ENGINEERS (Thousands)	CASUALTIES TO ROAD-FREIGHT TRAINMEN AND ENGINEERS ON DUTY IN TRAIN AND TRAIN- SERVICE ACCIDENTS			CASUALTY RATE PER		
					KILLED	INJURED	TOTAL	100 MILLION CAR MILES	MILLION TRAIN MILES	MILLION MAN- HOURS
(1)	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
(1)	1923	25 797 580	678 898	460 561	436	17 778	18 214	70.60	26.83	39.55
(2)	1924	25 193 036	633 288	401 340	295	13 955	14 250	56.56	22.50	35.51
(3)	1925	26 990 496	646 304	399 608	292	13 710	14 002	51.88	21.66	35.04
(4)	1926	28 780 342	670 458	412 781	311	14 270	14 581	50.66	21.75	35.32
(5)	1927	28 581 119	647 534	385 660	298	11 851	12 149	42.51	18.76	31.50
(6)	1928	29 145 755	636 469	362 306	197	9 970	10 167	34.88	15.97	28.06
(7)	Total 1923-28	164 488 328	3 912 951	2 422 256	1 829	81 534	83 363	Average 50.68	Average 21.30	Average 34.42
(8)	1929	29 922 710	648 909	364 808	247	9 118	9 365	31.30	14.43	25.67
(9)	1930	26 450 708	563 262	299 734	195	5 906	6 101	23.07	10.83	20.35
(10)	1931	22 290 854	479 632	237 583	136	4 213	4 349	19.51	9.07	18.31
(11)	1932	17 550 925	400 512	187 178	77	3 286	3 403	19.39	8.50	18.18
(12)	1933	18 030 948	403 619	186 302	104	2 883	2 987	16.57	7.40	16.03
(13)	1934	19 531 651	434 073	198 272	135	3 109	3 244	16.61	7.47	16.36
(14)	Total 1929-34	133 777 796	2 930 007	1 473 877	934	28 515	29 449	Average 22.01	Average 10.05	Average 19.98
(15)	1935	19 801 769	440 865	199 897	141	2 998	3 139	15.85	7.12	15.70
(16)	1936	22 756 196	501 073	233 074	170	3 929	4 099	18.01	8.18	17.99
(17)	1937	23 853 441	516 834	237 171	193	3 772	3 965	16.62	7.67	16.72
(18)	1938	20 309 999	431 891	191 014	122	2 631	2 753	13.56	6.37	14.41
(19)	1939	22 378 131	462 296	204 884	123	2 885	3 008	13.44	6.51	14.68
(20)	Total 1935-39	109 099 136	2 352 959	1 066 040	749	16 215	16 964	Average 15.55	Average 7.21	Average 15.91
(21)	Grand Total 1923-39	407 365 260	9 195 917	4 962 173	3 512	126 264	129 776	Average 31.86	Average 14.11	Average 26.15
COMPARISONS OF AVERAGE CASUALTY RATES										
(22)	PERIOD 1929 - 1934 COMPARED WITH PERIOD 1923 - 1928,	DECREASE						56.55%	52.82%	41.95%
(23)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1929 - 1934,	DECREASE						29.35%	28.26%	20.37%
(24)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1923 - 1928,	DECREASE						69.32%	66.15%	53.78%

SOURCE: Column (b), U.S.C. Statistics of Railways in the United States, statement No. 31 in issue of 1935 for years 1923 to 1935 inclusive; table No. 55 for years 1936 and 1937; table No. 158 for year 1938. Preliminary

**CLASS I RAILROADS OF THE UNITED STATES  
REFLECTED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION  
YEARS 1923 TO 1939, INCLUSIVE**

	YEAR	TOTAL FREIGHT TRAIN AND WORK TRAIN CAR MILES (Thousands)	TOTAL FREIGHT TRAIN AND WORK TRAIN TRAIN MILES (Thousands)	MAN-HOURS WORKED BY ROAD FREIGHT TRAINMEN AND ENGINEERS (Thousands)	CASUALTIES TO ROAD FREIGHT TRAINMEN AND ENGINEERS ON DUTY, IN TRAIN AND TRAIN- SERVICE ACCIDENTS			CASUALTY RATE PER		
					KILLED (a)	INJURED (f)	TOTAL (g)	100 MILLION CAR MILES	100 MILLION TRAIN MILES	100 MILLION MAN- HOURS
								(h)	(i)	(j)
(1)	1923	25 797 580	678 898	460 561	436	17 778	18 214	70.60	26.83	39.55
(2)	1924	25 193 036	633 288	401 340	295	13 955	14 250	56.56	22.50	35.51
(3)	1925	26 990 496	646 304	399 608	292	13 710	14 002	51.88	21.66	35.04
(4)	1926	28 780 342	670 458	412 781	311	14 270	14 581	50.66	21.75	35.32
(5)	1927	28 581 119	647 534	385 660	298	11 851	12 149	42.51	18.76	31.50
(6)	1928	29 145 755	636 469	362 306	197	9 970	10 167	34.88	15.97	28.06
(7)	Total 1923-28	164 488 328	3 912 951	2 422 256	1 829	81 534	83 363	Average 50.68	Average 21.30	Average 34.42
(8)	1929	29 922 710	648 909	364 808	247	9 118	9 365	31.30	14.43	25.67
(9)	1930	26 450 708	563 262	299 734	195	5 906	6 101	23.07	10.83	20.35
(10)	1931	22 290 854	479 632	237 583	136	4 213	4 349	19.51	9.07	18.31
(11)	1932	17 550 925	400 512	187 178	117	3 286	3 403	19.39	8.50	18.18
(12)	1933	18 030 948	403 619	186 302	104	2 683	2 987	16.57	7.40	16.03
(13)	1934	19 531 651	434 073	198 272	135	3 109	3 244	16.61	7.47	16.36
(14)	Total 1929-34	133 777 796	2 930 007	1 473 877	934	28 515	29 449	Average 22.01	Average 10.05	Average 19.98
(15)	1935	19 801 769	440 865	199 897	141	2 998	3 139	15.85	7.12	15.70
(16)	1936	22 756 196	501 073	233 074	170	3 929	4 099	18.01	8.18	17.59
(17)	1937	23 853 441	516 834	237 171	193	3 772	3 965	16.62	7.67	16.72
(18)	1938	20 309 599	431 891	191 014	122	2 631	2 753	13.56	6.37	14.41
(19)	1939	22 378 131	462 296	204 684	123	2 885	3 008	13.44	6.51	14.66
(20)	Total 1935-39	109 099 136	2 352 999	1 066 040	749	16 215	16 964	Average 15.55	Average 7.21	Average 15.91
(21)	Grand Total 1923-39	407 365 260	9 195 917	4 962 173	3 512	126 264	129 776	Average 31.86	Average 14.11	Average 26.15
COMPARISONS OF AVERAGE CASUALTY RATES										
(22)	PERIOD 1929 - 1934 COMPARED WITH PERIOD 1923 - 1928, DECREASE							56.55%	52.82%	41.95%
(23)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1929 - 1934, DECREASE							29.35%	28.26%	20.37%
(24)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1923 - 1928, DECREASE							69.32%	66.15%	53.78%

SOURCE: Column (b), I.C.C. Statistics of Railways in the United States, statement No. 31 in issue of 1935 for years 1923 to 1935 inclusive; table No. 55 for years 1936 and 1937; table No. 158 for year 1938. Preliminary Abstract of Railway Statistics for Year 1939.

Column (c), I.C.C. Statistics of Railways in the United States, statement No. 30 in issue of 1928 for years 1923 to 1928 inclusive; table No. 53 in issue of 1938 for years 1929 to 1938 inclusive. Preliminary Abstract of Railway Statistics for Year 1939.

Columns (d), (e) and (f), I.C.C. Annual Accident Bulletins, table No. 55



**Defendant's Exhibit No. 265 (Witness J.J. Sullivan)**  
**Feb. 5, 1941**

**CASUALTIES TO ROAD FREIGHT CONDUCTORS, BRAKEMEN AND FLAGMEN ON DUTY  
SUSTAINED IN TRAIN AND TRAIN-SERVICE ACCIDENTS  
CLASS I RAILROADS OF THE UNITED STATES  
REFLECTED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION  
YEARS 1923 TO 1939, INCLUSIVE**

	YEAR (a)	TOTAL FREIGHT TRAIN AND WORK TRAIN CAR MILES (Thousands) (b)	TOTAL FREIGHT TRAIN AND WORK TRAIN TRAIN MILES (Thousands) (c)	MAN-HOURS WORKED BY ROAD FREIGHT CONDUCTORS, BRAKEMEN, AND FLAGMEN (Thousands) (d)	CASUALTIES TO ROAD FREIGHT CONDUCTORS, BRAKEMEN AND FLAGMEN ON DUTY IN TRAIN & TRAIN-SERVICE ACCIDENTS			CASUALTY RATE PER		
					KILLED (e)	INJURED (f)	TOTAL (g)	100 MILLION CAR MILES (h)	MILLION TRAIN MILES (i)	MILLION MAN- HOURS (j)
(1)	1923	25 797 580	678 898	268 548	322	11 910	12 232	47.42	18.02	45.33
(2)	1924	25 193 036	633 288	234 752	215	9 838	10 053	39.90	15.87	42.82
(3)	1925	26 990 496	646 304	232 998	228	9 855	10 083	37.36	15.60	43.28
(4)	1926	28 780 342	670 458	239 990	256	10 282	10 538	36.62	15.72	43.91
(5)	1927	28 581 119	647 534	224 081	215	8 876	9 091	31.81	14.04	40.57
(6)	1928	29 145 755	636 469	210 124	163	7 662	7 825	26.85	12.29	37.24
(7)	Total 1923-28	164 488 328	3 912 951	1 410 493	1 399	58 423	59 822	Average 36.37	Average 15.29	Average 42.41
(8)	1929	29 922 710	648 909	211 276	176	6 910	7 086	23.68	10.92	33.54
(9)	1930	26 450 708	563 262	173 888	152	4 587	4 739	17.92	8.41	27.25
(10)	1931	22 290 854	479 632	137 510	109	3 275	3 384	15.18	7.06	24.61
(11)	1932	17 550 925	400 512	107 909	97	2 586	2 683	15.29	6.70	24.86
(12)	1933	18 030 948	403 619	106 829	82	2 283	2 365	13.12	5.86	22.14
(13)	1934	19 531 651	434 073	113 645	106	2 460	2 566	13.14	5.91	22.58
(14)	Total 1929-34	133 777 796	2 930 007	851 057	722	22 101	22 823	Average 17.06	Average 7.79	Average 26.82
(15)	1935	19 801 769	440 865	114 415	105	2 403	2 508	12.67	5.69	21.92
(16)	1936	22 756 196	501 073	133 026	125	3 119	3 244	14.26	6.47	24.39
(17)	1937	23 853 441	516 834	135 565	138	2 973	3 111	13.04	6.02	22.95
(18)	1938	20 309 599	431 891	109 601	92	2 069	2 161	10.64	5.00	19.72
(19)	1939	22 378 131	462 296	117 045	86	2 294	2 380	10.64	5.15	20.33
(20)	Total 1935-39	109 099 136	2 352 959	609 652	546	12 858	13 404	Average 12.29	Average 5.70	Average 21.99
(21)	Grand Total 1923-39	407 365 260	9 195 917	2 871 202	2,667	93 382	96 049	Average 23.58	Average 10.44	Average 33.45
COMPARISONS OF AVERAGE CASUALTY RATES										
(22)	PERIOD 1929 - 1934 COMPARED WITH PERIOD 1923 - 1928,				DECREASE			53.09%	49.05%	36.76%
(23)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1929 - 1934,				DECREASE			27.96%	26.83%	18.01%
(24)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1923 - 1928,				DECREASE			66.21%	62.72%	48.15%

	YEAR (a)	TOTAL RAILROAD TRAIN AND WORK TRAIN CAR MILES (Thousands) (b)	TOTAL RAILROAD TRAIN AND WORK TRAIN MILES (Thousands) (c)	CONDUCTORS, BRAKEMEN, AND FLAGMEN (Thousands) (d)	CONDUCTORS, BRAKEMEN AND FLAGMEN ON DUTY IN TRAIN & TRAIN-SERVICE ACCIDENTS			100 MILLION CAR MILES (h)	MILLION TRAIN MILES (i)	MILLION MAN- HOURS (j)
		KILLED (e)	INJURED (f)	TOTAL (g)	(h)	(i)	(j)			
(1)	1923	25 797 580	678 898	268 548	322	11 910	12 232	47.42	18.08	45.33
(2)	1924	25 193 036	633 288	234 752	215	9 838	10 053	39.90	15.87	42.82
(3)	1925	26 990 496	646 304	232 998	228	9 855	10 083	37.36	15.60	43.28
(4)	1926	28 780 342	670 458	239 990	256	10 282	10 538	36.62	15.72	43.91
(5)	1927	28 581 119	647 534	224 081	215	8 876	9 091	31.81	14.04	40.57
(6)	1928	29 145 755	636 469	210 124	163	7 662	7 825	26.85	12.29	37.24
(7)	Total 1923-28	164 488 328	3 912 951	1 410 493	1 399	58 423	59 822	Average 36.37	Average 15.29	Average 42.41
(8)	1929	29 922 710	648 909	211 276	176	6 910	7 086	23.68	10.92	33.54
(9)	1930	26 450 708	563 262	173 888	152	4 587	4 739	17.92	8.41	27.25
(10)	1931	22 290 854	479 632	137 510	109	3 275	3 384	15.18	7.06	24.61
(11)	1932	17 590 925	400 512	107 909	97	2 586	2 683	15.29	6.70	24.86
(12)	1933	18 030 948	403 619	106 829	82	2 283	2 365	13.12	5.86	22.14
(13)	1934	19 531 651	434 073	113 645	106	2 460	2 566	13.14	5.91	22.58
(14)	Total 1929-34	133 777 796	2 930 007	851 057	722	22 101	22 823	Average 17.06	Average 7.79	Average 26.82
(15)	1935	19 801 769	440 865	114 415	105	2 403	2 508	12.67	5.69	21.92
(16)	1936	22 756 196	501 073	133 026	125	3 119	3 244	14.26	6.47	24.39
(17)	1937	23 853 441	516 834	135 565	138	2 973	3 111	13.04	6.02	22.95
(18)	1938	20 309 599	431 891	109 601	92	2 069	2 161	10.64	5.00	19.72
(19)	1939	22 378 131	462 296	117 045	86	2 294	2 380	10.64	5.15	20.33
(20)	Total 1935-39	109 099 136	2 352 959	609 652	546	12 858	13 404	Average 12.29	Average 5.70	Average 21.99
(21)	Grand Total 1923-39	407 365 260	9 195 917	2 871 202	2 667	93 382	96 049	Average 23.58	Average 10.44	Average 33.45
COMPARISONS OF AVERAGE CASUALTY RATES										
(22)	PERIOD 1929 - 1934 COMPARED WITH PERIOD 1923 - 1928, DECREASE							53.09%	49.05%	36.76%
(23)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1929 - 1934, DECREASE							27.96%	26.83%	18.01%
(24)	PERIOD 1935 - 1939 COMPARED WITH PERIOD 1923 - 1928, DECREASE							66.21%	62.72%	48.15%

SOURCE: Column (b), I.C.C. Statistics of Railways in the United States, statement No. 31 in issue of 1935 for years 1923 to 1935 inclusive; table No. 55 for years 1936 and 1937; table No. 158 for year 1938. Preliminary Abstract of Railway Statistics for year 1939.

Column (c), I.C.C. Statistics of Railways in the United States, statement No. 30 in issue of 1928 for years 1923 to 1928; table No. 53 in issue of 1938 for years 1929 to 1938, inclusive. Preliminary Abstract of Railway Statistics for year 1939.

Columns (d), (e) and (f), I.C.C. Annual Accident Bulletins, table No. 5.



**\*\*\*\*\* Feb. 5, 1941**

CASUALTIES TO ROAD FREIGHT CONDUCTIONS, BRAKEMEN AND FLAGMEN  
TRAIN-SERVICE ACCIDENTS CAUSED BY  
SUDDEN STOP, START, LUNCH OR JERK OF LOCOMOTIVE, CAR OR TRAIN  
ALL RAILROADS OF THE UNITED STATES  
REFLECTED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION  
YEARS 1923 TO 1939, INCLUSIVE

	YEAR (a)	TOTAL FREIGHT AND WORK TRAIN CAR MILES (Thousands) (b)	TOTAL FREIGHT AND WORK TRAIN TRAIN MILES (Thousands) (c)	CASUALTIES TO ROAD FREIGHT CONDUCTORS, BRAKEMEN AND FLAGMEN, CAUSED BY SUDDEN STOP, START, LURCH OR JERK OF TRAIN			CASUALTY RATE PER	
				KILLED (d)	INJURED (e)	TOTAL (f)	100 MILLION CAR MILES (g)	MILLION TRAIN MILES (h)
(1)	1923	25,797,580	678,898	11	1,946	1,957	7.59	2.88
(2)	1924	25,193,036	633,288	8	1,667	1,675	6.65	2.64
(3)	1925	26,990,496	646,304	10	1,818	1,828	6.77	2.83
(4)	1926	28,780,342	670,458	8	1,922	1,930	6.71	2.88
(5)	1927	28,581,119	647,534	10	1,777	1,787	6.25	2.76
(6)	1928	29,145,755	636,469	6	1,571	1,577	5.41	2.48
(7)	TOTAL 1923-28	164,488,328	3,912,951	53	10,701	10,754	AVERAGE 6.64 2.75	
(8)	1929	29,922,710	648,909	4	1,451	1,455	4.86	2.24
(9)	1930	26,450,708	563,282	5	971	976	3.69	1.73
(10)	1931	22,290,854	479,632	5	709	714	3.20	1.49
(11)	1932	17,550,985	400,512	4	499	503	2.87	1.26
(12)	1933	18,030,948	403,619	3	417	420	2.33	1.04
(13)	1934	19,531,651	434,073	3	493	496	2.54	1.14
(14)	TOTAL 1929-34	133,777,796	2,930,007	24	4,540	4,564	AVERAGE 3.41 1.56	
(15)	1935	19,801,769	440,865	3	509	512	2.59	1.16
(16)	1936	22,756,196	501,073	3	671	674	2.96	1.35
(17)	1937	23,853,441	516,834	5	565	570	2.39	1.10
(18)	1938	20,309,599	431,891	2	316	318	1.57	.74
(19)	1939	22,378,131	462,296	3	396	399	1.78	.86
(20)	TOTAL 1935-39	109,099,136	2,352,959	16	2,457	2,473	AVERAGE 2.27 1.05	
(21)	GRAND TOTAL 1923-39	407,365,260	9,195,917	93	17,698	17,791	AVERAGE 4.37 1.93	
COMPARISONS OF AVERAGE CASUALTY RATES								
(22)	PERIOD 1929 - 34 COMPARED WITH PERIOD 1923 - 28, DECREASE						47.86%	43.27%



(1)	1923	25,797,580	678,898	11	1,946	1,957	7.57	2.88
(2)	1924	25,193,036	633,288	8	1,667	1,675	6.65	2.64
(3)	1925	26,990,496	646,304	10	1,818	1,828	6.77	2.83
(4)	1926	28,710,342	670,458	8	1,922	1,930	6.71	2.88
(5)	1927	28,581,119	647,534	10	1,777	1,787	6.25	2.76
(6)	1928	29,145,755	636,469	6	1,571	1,577	5.41	2.48
(7)	TOTAL 1923-28	164,488,328	3,912,951	53	10,701	10,754	AVERAGE 6.54	2.75
(8)	1929	29,922,710	648,909	4	1,451	1,455	4.86	2.24
(9)	1930	26,450,708	563,262	5	971	976	3.69	1.73
(10)	1931	22,290,854	479,632	5	709	714	3.20	1.49
(11)	1932	17,550,925	400,512	4	499	503	2.87	1.26
(12)	1933	18,020,948	403,619	3	417	420	2.33	1.04
(13)	1934	19,531,651	434,073	3	493	496	2.54	1.14
(14)	TOTAL 1929-34	133,777,796	2,930,007	24	4,540	4,564	AVERAGE 3.41	1.56
(15)	1935	19,801,769	440,865	3	509	512	2.59	1.16
(16)	1936	22,756,196	501,073	3	671	674	2.96	1.35
(17)	1937	23,853,441	516,834	5	585	570	2.39	1.10
(18)	1938	20,309,599	431,891	2	216	318	1.57	.74
(19)	1939	22,378,131	462,296	3	396	399	1.78	.86
(20)	TOTAL 1935-39	109,099,136	2,352,959	16	2,457	2,473	AVERAGE 2.27	1.05
(21)	GRAND TOTAL 1923-39	407,365,260	9,195,917	93	17,698	17,791	AVERAGE 4.37	1.93
COMPARISONS OF AVERAGE CASUALTY RATES								
(22)	PERIOD 1929 - 34 COMPARED WITH PERIOD 1923 - 28,				DECREASE	47.86%	43.27%	
(23)	PERIOD 1935 - 39 COMPARED WITH PERIOD 1929 - 34,				DECREASE	33.43%	32.69%	
(24)	PERIOD 1935 - 39 COMPARED WITH PERIOD 1923 - 28,				DECREASE	65.29%	61.82%	

SOURCE: Column (b)- I.C.C. Statistics of Railways in the United States, Statement No. 31 in issue of 1935 for years 1923 to 1935, inclusive; Table No. 55 for years 1936 and 1937; Table No. 158 for year 1938, Preliminary Abstract of Railway Statistics for year 1939.

Column (c)- I.C.C. Statistics of Railways in the United States, Statement No. 30 in issue of 1928 for years 1923 to 1928, inclusive; Table No. 53 in issue of 1938 for years 1929 to 1938, inclusive, Preliminary Abstract of Railway Statistics for year 1939.

Columns (d) and (e)- I.C.C. Annual Accident Bulletins, Table No. 80, Code Causes 7007, 7008, 7009 and 7010 combined.

**Defendant's Exhibit No. 267 (Witness J.J. Sullivan)  
Feb. 5, 1941**

CASUALTIES TO PASSENGERS ON TRAINS  
IN TRAIN AND TRAIN-SERVICE ACCIDENTS  
CLASS 1 RAILROADS OF THE UNITED STATES  
EXPANDED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION  
FOR THE YEARS 1923 TO 1939, INCLUSIVE.

	YEAR (a)	NUMBER OF PASSENGERS CARRIED (Thousands) (b)	NUMBER OF PASSENGERS CARRIED ONE WAY (Thousands) (c)	NUMBER OF CASUALTIES TO PASSENGERS ON TRAINS									CASUALTY RATE PER 100	
				TRAIN ACCIDENTS			TRAIN SERVICE ACCIDENTS			TOTAL TRAIN AND TRAIN-SERVICE ACCIDENTS			PER PASSENGER CARRIED	PER MILE
				(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)		
(1)	1923	984,913	38,005,922	41	7,581	2,422	41	2,797	3,408	102	5,550	5,640	5.71	14.84
(2)	1924	932,678	36,125,685	40	2,108	2,148	81	3,021	3,100	122	5,129	5,290	5.43	14.53
(3)	1925	884,690	35,943,889	83	2,012	2,095	96	2,740	2,796	139	4,752	4,896	5.52	13.60
(4)	1926	841,682	35,090,225	79	1,794	1,875	51	2,079	2,530	130	4,975	4,405	5.11	12.41
(5)	1927	809,444	33,646,134	10	1,463	1,473	46	2,195	2,241	96	3,690	3,714	4.40	11.03
(6)	1928	779,154	31,542,720	16	1,375	1,391	43	1,807	1,930	29	3,362	3,321	4.26	10.53
(7)	TOTAL 1923-28	5,276,683	220,780,565	269	11,335	11,604	338	15,279	15,617	607	20,667	21,221	Average 5.16	Average 12.91
(8)	1929	779,558	31,078,423	30	1,425	1,445	42	1,790	2,032	72	3,625	3,697	4.74	11.90
(9)	1930	704,098	26,823,992	7	777	784	31	1,745	1,776	38	2,522	2,960	3.63	9.54
(10)	1931	596,665	21,890,503	4	487	491	26	1,259	1,545	30	2,006	2,036	3.41	9.30
(11)	1932	479,033	16,974,582	1	410	411	16	1,408	1,424	17	1,818	1,835	3.83	10.81
(12)	1933	433,252	16,344,107	22	652	674	15	1,308	1,373	37	1,940	1,997	4.41	12.22
(13)	1934	450,135	18,038,053	12	390	402	15	1,470	1,485	27	1,860	1,887	4.19	10.46
(14)	TOTAL 1929-34	3,443,141	131,157,860	76	4,351	4,427	145	9,440	9,585	221	13,771	14,012	Average 4.07	Average 10.68
(15)	1935	446,190	18,079,794	1	364	365	17	1,498	1,515	18	1,862	1,880	4.21	10.17
(16)	1936	489,605	22,427,065	6	732	738	10	1,691	1,701	16	2,423	2,439	4.98	10.08
(17)	1937	497,549	24,609,613	3	536	539	15	1,958	1,973	18	2,494	2,512	5.05	10.19
(18)	1938	452,979	21,633,138	52	472	504	17	1,794	1,811	62	2,366	2,335	5.15	10.79
(19)	1939	451,526	22,637,464	13	775	788	14	1,714	1,728	27	2,409	2,516	5.57	11.10
(20)	TOTAL 1935-39	2,337,929	109,847,074	75	2,879	2,954	73	8,655	8,738	148	11,534	11,682	Average 5.00	Average 10.63
COMPARISONS OF AVERAGE CASUALTY RATES														
(21)	PERIOD 1929 - 34 COMPARED WITH PERIOD 1923 - 28, INCREASE												21.12%	17.27%
(22)	PERIOD 1935 - 39 COMPARED WITH PERIOD 1929 - 34, INCREASE												22.89%	47%
(23)	PERIOD 1935 - 39 COMPARED WITH PERIOD 1923 - 28, INCREASE												3.10%	17.64%

NOTE: An injury to a passenger is reportable if the injury is sufficient to incapacitate the injured person from following his customary vocation or mode of living for a period of more than one day. (I.C.C. Rules Governing the Reporting of Accidents.)

SOURCE: Column (b), I.C.C. Statistics of Railroads in the United States, Statement No. 25 for years 1923 and 1924; I.C.C. Annual Accident Bulletin, Table No. 97 for subsequent years.

Column (c), I.C.C. Annual Accident Bulletin, Table No. 100.

Columns (d), (e), (f) and (h), I.C.C. Annual Accident Bulletin, Table No. 55.



**Defendant's Exhibit No. 268 (Witness J.J. Sullivan)**  
**Feb. 5, 1941**

CASUALTIES IN HIGHWAY GRADE CROSSING ACCIDENTS  
 IN WHICH AUTOMOBILES WERE INVOLVED, ALL STEAM RAILWAYS,  
 REFLECTED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION

YEARS 1923 - 1939, INCLUSIVE

	YEAR (a)	TOTAL TRAIN MILES (thousands) (b)	NUMBER OF AUTOMOBILES REGISTERED (c)	CASUALTIES TO ALL CLASSES OF PERSONS			CASUALTY RATE PER	
				KILLED (d)	INJURED (e)	TOTAL CASUALTIES (f)	MILLION TRAIN MILES (g)	10,000 AUTOMOBILES REGISTERED (h)
(1)	1923	1,245,099	15,092,177	1,759	5,416	7,175	5.76	4.75
(2)	1924	1,204,302	17,591,981	1,688	5,650	7,338	6.09	4.17
(3)	1925	1,220,846	19,954,347	1,784	5,916	7,700	6.31	3.86
(4)	1926	1,248,897	22,001,393	2,062	6,358	8,420	6.74	3.83
(5)	1927	1,220,987	23,127,315	1,974	6,068	8,042	6.59	3.48
(6)	1928	1,202,678	24,493,124	2,165	6,218	8,383	6.97	3.42
(7)	Total 1923-28	7,342,809	122,260,337	11,432	35,626	47,058	(Average) 6.41	3.85
(8)	1929	1,214,360	26,501,443	2,085	6,347	8,432	6.94	3.18
(9)	1930	1,106,386	26,523,779	1,695	5,206	6,901	6.24	2.60
(10)	1931	965,181	25,814,103	1,580	4,336	5,916	6.13	2.29
(11)	1932	821,158	24,136,879	1,310	3,778	5,088	6.20	2.11
(12)	1933	786,720	23,827,290	1,305	3,496	4,801	6.10	2.01
(13)	1934	818,473	24,933,403	1,320	4,099	5,419	6.62	2.17
(14)	Total 1929-34	5,712,278	151,736,897	9,295	27,262	36,557	(Average) 6.40	2.42
(15)	1935	829,198	26,221,052	1,442	4,434	5,876	7.09	2.24
(16)	1936	905,749	26,221,291	1,519	4,662	6,181	6.82	2.19
(17)	1937	933,219	29,705,220	1,607	4,904	6,511	6.98	2.19
(18)	1938	825,682	29,485,680	1,307	3,783	5,090	6.16	1.73
(19)	1939	853,179	30,615,087	1,190	3,744	4,934	5.78	1.61
(20)	Total 1935-39	4,347,027	144,248,330	7,065	21,527	28,592	(Average) 6.58	1.98
(21)	Grand Total 1923-39	17,472,114	18,245,544	27,792	84,415	112,207	(Average) 6.45	2.68

COMPARISONS OF AVERAGE CASUALTY RATES		
	Train Mile Basis	Registered Automobile Basis
PERIOD 1929 - 1934 COMPARED WITH PERIOD 1923 - 1928	0.16%	37.40%
PERIOD 1935 - 1939 COMPARED WITH PERIOD 1929 - 1934	2.81%	17.84%
	2.65%	48.57%



	YEAR (a)	TOTAL TRAIN MILES (thousands) (b)	NUMBER OF AUTOMOBILES REGISTERED (c)	CASUALTIES TO ALL CLASSES OF PERSONS			CASUALTY RATE PER	
				KILLED (d)	INJURED (e)	TOTAL CASUALTIES (f)	MILLION TRAIN MILES (g)	10,000 AUTOMOBILES REGISTERED (h)
(1)	1923	1,245,099	15,092,177	1,759	5,416	7,175	5.76	4.75
(2)	1924	1,204,302	17,591,981	1,688	5,650	7,338	6.09	4.17
(3)	1925	1,220,846	19,954,347	1,784	5,916	7,700	6.31	3.86
(4)	1926	1,248,897	22,001,393	2,062	6,358	8,420	6.74	3.83
(5)	1927	1,220,987	23,127,315	1,974	6,068	8,042	6.59	3.48
(6)	1928	1,202,678	24,493,124	2,165	6,218	8,383	6.97	3.42
(7)	Total 1923-28	7,342,809	122,260,337	11,432	35,626	47,058	6.41 (Average)	3.85
(8)	1929	1,214,360	26,501,443	2,085	6,347	8,432	6.94	3.18
(9)	1930	1,106,386	26,523,779	1,695	5,206	6,901	6.24	2.60
(10)	1931	965,181	25,814,103	1,580	4,336	5,916	6.13	2.29
(11)	1932	821,158	24,136,879	1,310	3,778	5,088	6.20	2.11
(12)	1933	786,720	23,827,290	1,305	3,496	4,801	6.10	2.01
(13)	1934	818,473	24,933,403	1,320	4,099	5,419	6.62	2.17
(14)	Total 1929-34	5,712,278	151,736,897	9,295	27,262	36,557	6.40 (Average)	2.41
(15)	1935	829,198	26,221,052	1,442	4,434	5,876	7.09	2.24
(16)	1936	905,749	28,221,291	1,519	4,662	6,181	6.82	2.19
(17)	1937	933,219	29,705,220	1,607	4,904	6,511	6.98	2.19
(18)	1938	825,682	29,485,680	1,307	3,783	5,090	6.16	1.73
(19)	1939	853,179	30,615,087	1,190	3,744	4,934	5.78	1.61
(20)	Total 1935-39	4,347,027	144,248,330	7,065	21,527	28,592	6.58 (Average)	1.98
(21)	Grand Total 1923-39	17,402,114	418,245,564	27,792	84,415	112,207	6.45 (Average)	2.68

COMPARISONS OF AVERAGE CASUALTY RATES			Train Mile Basis	Registered Automobile Basis
PERIOD 1929 - 1934 COMPARED WITH PERIOD 1923 - 1928		DECREASE	0.16%	37.40%
PERIOD 1935 - 1939 COMPARED WITH PERIOD 1929 - 1934		DECREASE	2.81%	17.84%
PERIOD 1935 - 1939 COMPARED WITH PERIOD 1923 - 1928		DECREASE	2.65%	48.57%

SOURCE: Column (b), Interstate Commerce Commission, Statistics of Railways, Table No. 53.  
Columns (c), (d) and (e), Interstate Commerce Commission, Accident Bulletins, Summary No. 24.

↓ = Increase

Defendant's Exhibit No. 269 (Witness J.J. Sullivan)  
Feb. 5, 1941

TRAIN ACCIDENTS  
AND RESULTANT CASUALTIES  
ALL RAILROADS OF THE UNITED STATES  
REFLECTED BY STATISTICS OF THE INTERSTATE COMMERCE COMMISSION  
YEARS 1923 TO 1939, INCLUSIVE

	YEAR	TOTAL CAR MILES (Thousands)	TOTAL TRAIN MILES (Thousands)	TOTAL LOCO. MILES (Thousands)	NUMBER OF TRAIN ACCIDENTS AS TO CLASS						NUMBER OF TRAIN ACCIDENTS RESULTING IN CASUALTIES	NUMBER OF CASUALTIES TO TRAIN AND ENGINE- MEN ON DUTY IN ALL TRAIN ACCIDENTS		
					COLLISIONS	DERAILMENTS	LOCOMOTIVE BOILER	OTHER LOCOMOTIVE	MISC.	TOTAL		KILLED	INJURED	TOTAL
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
(1)	1923	29,432,500	1,245,099	1,251,126	7,115	16,708	67	971	2,234	27,497	1,592	249	1,626	1,875
(2)	1924	28,089,088	1,204,302	1,244,774	5,166	14,259	46	756	2,141	22,368	1,244	125	1,243	1,428
(3)	1925	30,785,543	1,220,246	1,273,746	5,166	12,739	29	748	2,025	20,765	1,195	126	1,207	1,395
(4)	1926	32,644,043	1,248,897	1,283,273	5,572	12,605	30	732	2,137	21,077	1,316	141	1,319	1,480
(5)	1927	32,442,178	1,220,987	1,275,842	4,803	11,370	22	644	2,117	18,974	1,087	140	922	1,112
(6)	1928	32,994,940	1,202,678	1,245,908	4,302	9,938	25	552	2,132	16,949	951	123	940	1,065
(7)	TOTAL 1923-28	187,220,289	7,342,809	20,705,728	32,124	77,640	219	4,425	15,243	127,652	7,325	1,064	7,287	8,351
(8)	1929	23,022,943	1,214,360	1,277,624	4,426	9,871	18	712	2,151	17,185	925	141	822	992
(9)	1930	20,177,596	1,102,386	1,220,844	2,579	6,967	29	742	1,596	12,313	702	112	550	643
(10)	1931	25,608,792	945,221	1,220,224	1,913	4,254	15	635	927	8,062	509	85	361	436
(11)	1932	20,350,887	821,158	1,151,326	1,265	3,321	9	525	650	5,770	395	28	225	243
(12)	1933	20,597,234	726,720	1,107,024	1,219	3,291	15	423	635	5,223	417	59	304	343
(13)	1934	22,179,797	818,473	1,156,220	1,317	3,489	24	525	656	6,023	433	94	309	403
(14)	TOTAL 1929-34	152,743,239	5,712,318	8,128,408	13,123	31,493	106	3,610	6,627	54,994	3,420	550	2,207	2,197
(15)	1935	22,512,343	829,198	1,123,046	1,231	4,031	8	336	725	6,251	456	60	297	357
(16)	1936	25,562,229	905,749	1,320,212	1,767	4,226	12	674	904	8,266	590	108	421	529
(17)	1937	24,642,096	923,219	1,348,217	1,910	4,941	12	623	920	8,412	609	105	409	515
(18)	1938	23,141,532	820,622	1,177,597	1,201	3,272	16	500	693	5,668	427	76	225	345
(19)	1939	25,256,741	853,179	1,240,882	1,527	3,124	9	516	798	6,074	435	77	314	391
(20)	TOTAL 1935-39	123,348,941	4,347,027	6,290,945	7,656	20,394	66	2,849	4,040	35,005	2,519	428	1,725	2,153

SOURCE: Columns (b) and (c) - I.C.C. Statistics of Railways in the United States, Statements Nos. 30 and 31, issue of 1928, for years 1923 to 1928, inclusive; tables Nos. 53 and 55 issue of 1939 for years 1929 to 1936, inclusive; Preliminary Abstract of Railway Statistics for year 1939.



	YEAR	REAR-END AND HEAD-ON COLLISIONS						TRAIN ACCIDENTS DUE TO DEFECTS IN OR FAILURES OF EQUIPMENT											CASUALTIES TO TRAINMEN AND ENGINEERS ON DUTY IN THESE ACCIDENTS		
		NUMBER OF REAR-END	NUMBER OF HEAD-ON	TOTAL REAR-END AND HEAD-ON	CASUALTIES TO TRAINMEN AND ENGINEERS ON DUTY IN REAR-END AND HEAD-ON COLLISIONS			LOCOMOTIVES AND TENDERS	TRUCKS	WHEELS AND AXLES	POWER BRAKES	HAND BRAKES	COUPLERS	DRAFT RIGGING	CAR BODIES ETC.	TOTAL					
					KILLED	INJURED	TOTAL										KILLED	INJURED	TOTAL		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)		
(1)	1923	645	293	938	63	393	456	973	2,341	3,427	629	1,162	741	910	1,639	11,622	9	234	233		
(2)	1924	407	206	613	45	292	337	668	1,903	2,839	504	892	561	704	1,204	9,295	7	161	168		
(3)	1925	387	201	588	38	276	316	688	1,638	2,518	417	730	449	585	1,161	8,186	9	157	166		
(4)	1926	434	200	634	54	340	394	635	1,569	2,426	428	739	406	576	1,136	7,934	4	152	156		
(5)	1927	323	155	478	29	188	217	547	1,512	2,139	457	633	466	630	1,041	7,418	5	139	144		
(6)	1928	290	138	428	27	177	204	470	1,280	1,956	373	602	362	546	1,078	6,687	5	124	129		
(7)	TOTAL 1923-28	2,486	1,195	3,679	256	1,469	1,924	4,001	10,283	15,296	2,808	4,757	3,007	3,951	7,259	51,342	39	907	946		
(8)	1929	271	154	425	47	177	224	594	1,342	1,867	347	542	421	565	965	6,643	6	147	153		
(9)	1930	211	105	316	33	99	132	606	949	1,429	289	422	316	426	607	5,034	5	103	108		
(10)	1931	132	56	188	9	43	52	515	578	1,010	120	247	158	269	277	3,174	4	69	73		
(11)	1932	79	35	114	17	55	72	380	490	776	97	125	95	151	156	2,332	3	60	63		
(12)	1933	69	49	118	11	49	60	360	546	726	110	172	77	142	189	2,384	-	43	43		
(13)	1934	60	45	105	16	46	62	418	547	820	76	219	102	165	168	2,517	5	54	59		
(14)	TOTAL 1929-34	862	444	1,306	133	469	602	2,873	4,454	6,628	1,021	1,767	1,169	1,716	2,364	22,014	23	476	499		
(15)	1935	84	29	113	9	49	58	412	687	869	73	207	153	146	132	2,679	2	62	64		
(16)	1936	151	80	231	39	108	147	533	862	1,135	73	257	171	167	213	3,411	5	63	68		
(17)	1937	129	61	190	31	89	120	486	777	1,032	59	221	152	202	191	3,120	1	55	56		
(18)	1938	78	52	130	15	56	73	403	315	639	42	128	83	136	127	2,073	1	35	36		
(19)	1939	92	40	132	6	46	52	390	275	791	46	140	94	120	183	2,039	5	41	46		
(20)	TOTAL 1935-39	534	272	806	100	350	450	2,234	2,915	4,666	293	953	653	771	846	13,322	14	256	270		

SOURCE: I.C.C. Annual Accident Bulletins; columns (b), (c), (e) and (f) Table No. 61; columns (h) to (r) Table No. 65.



	YEAR	ALL CLASSES OF TRAIN ACCIDENTS						HEAD-ON AND HEAD-ON COLLISIONS				TRAIN ACCIDENTS DUE TO DEFECTS IN OR FAILURE OF EQUIPMENT			
		NUMBER OF ACCIDENTS PER			CASUALTY RATE, TRAINS AND PASSENGERS PER			NUMBER PER		CASUALTY RATE, TRAINS AND PASSENGERS PER		NUMBER PER		CASUALTY RATE, TRAINS AND PASSENGERS PER	
		100 MILLION CAR MILES			100 MILLION CAR MILES			100 MILLION TRAIN MILES		100 MILLION TRAIN MILES		100 MILLION CAR MILES		100 MILLION TRAIN MILES	
		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
(1)	1923	93.43	22.08	15.08	4.87	1.81	1.08	.75	.81	.37	.35	40.17	9.44	.79	.19
(2)	1924	77.43	18.87	12.88	4.84	1.18	.88	.82	.35	.38	.19	32.17	7.72	.88	.14
(3)	1925	67.32	17.05	11.73	4.83	1.14	.79	.88	.33	.38	.18	28.89	6.71	.84	.14
(4)	1926	64.82	16.88	11.80	4.83	1.19	.82	.81	.35	.33	.21	24.39	6.38	.83	.12
(5)	1927	58.44	15.84	10.88	4.45	.91	.88	.59	.37	.15	.18	22.85	4.88	.44	.12
(6)	1928	51.37	14.09	9.71	3.82	.88	.41	.38	.25	.17	.12	20.27	3.84	.38	.11
(7)	TOTAL 1923-28	62.18	17.38	11.88	4.45	1.14	.78	.58	.24	.28	.18	27.42	6.48	.58	.14
(8)	1929	50.80	14.15	9.67	2.88	.88	.88	.35	.24	.18	.13	19.84	5.67	.45	.13
(9)	1930	48.80	11.13	7.74	2.13	.88	.40	.29	.28	.12	.08	14.85	4.84	.34	.10
(10)	1931	31.44	8.34	5.08	1.78	.48	.32	.19	.14	.08	.04	12.38	3.29	.29	.08
(11)	1932	28.38	7.08	4.10	1.68	.43	.39	.14	.10	.09	.05	11.44	2.84	.21	.08
(12)	1933	27.30	7.15	5.08	1.78	.48	.33	.15	.12	.08	.05	11.28	2.88	.21	.08
(13)	1934	27.18	7.28	3.21	1.88	.48	.38	.15	.11	.08	.05	11.38	2.08	.27	.07
(14)	TOTAL 1929-34	35.98	9.82	4.77	2.07	.88	.39	.23	.16	.11	.08	14.41	2.85	.23	.09
(15)	1935	29.10	7.90	3.64	1.88	.43	.38	.14	.10	.07	.08	11.90	2.23	.28	.08
(16)	1936	24.28	6.15	4.27	2.07	.88	.40	.27	.18	.15	.11	13.83	3.77	.27	.08
(17)	1937	21.28	6.81	4.15	1.91	.88	.37	.28	.14	.13	.09	11.48	3.24	.21	.08
(18)	1938	24.88	6.88	4.88	1.87	.44	.31	.15	.11	.09	.08	8.98	2.21	.15	.04
(19)	1939	24.08	7.12	4.90	1.88	.44	.32	.15	.11	.08	.04	8.07	2.38	.18	.05
(20)	TOTAL 1935-39	23.38	6.08	5.54	1.78	.50	.34	.19	.13	.10	.07	10.80	3.05	.23	.08
(21)		47.21%	44.88%	43.80%	53.88%	51.78%	50.00%	54.00%	58.84%	57.88%	61.11%	47.48%	42.48%	37.74%	38.71%
(22)	(See column)	21.14%	18.38%	17.87%	15.48%	9.08%	12.88%	17.38%	18.78%	9.08%	12.88%	25.08%	20.88%	33.38%	33.38%
(23)		58.37%	53.88%	53.38%	50.78%	54.14%	54.61%	58.00%	61.78%	61.54%	61.11%	60.61%	54.88%	58.48%	57.14%

INDEX TO COMPARISONS REFLECTED IN ITEMS (21), (22) AND (23)

ITEM (21) PER CENT OF DECREASE, PERIOD 1929 - 34 COMPARED WITH PERIOD 1923 - 28

ITEM (22) PER CENT OF DECREASE, PERIOD 1935 - 39 COMPARED WITH PERIOD 1929 - 34

ITEM (23) PER CENT OF DECREASE, PERIOD 1935 - 39 COMPARED WITH PERIOD 1923 - 28